MEDICAL AND SURGICAL REPORTER.

No. 1484.1

ne d, of sal ty no ily id.

ion re-

vas tle

melity

g a rom tely ring pon and

nce

Mel-

ead.

his

m s

and,

de-

iron

food

ons.

com-

pro-

this

This

the

ap-

ined

pre-

com-

ca of

rty of

ut a

ed off

for a

m on

p by

carry

After

d tore

morn-

isters

kened

d the

ertro-

lomel.

, and

cured.

nel be

PHILADELPHIA, AUGUST 8, 1885.

[Vol. LIII .- No. 6.

ORIGINAL DEPARTMENT.

COMMUNICATIONS.

EMMET'S OPERATION—WHEN SHALL IT AND WHEN SHALL IT NOT BE PERFORMED?*

BY E. G. ZINKE, M. D., Of Cincinnati, Ohio.

Trachelorraphy, or Emmet's operation for the cure of laceratio cervicis uteri, and its consequences, though recognized by many in this country as a measure productive of much good, is slow in receiving acceptance with gynecologists abroad. The injury is readily diagnosed, and its evil results easily appreciated. What treatment could be more reasonable, more rational, more simple, more effective? In my judgment, there is but one point left to be discussed. This point is embodied in the title of this paper. I have addressed to a large number of the most prominent American and foreign gynecologists the follow. ing series of questions, taking care to appeal to those known to be opposed to the operation, as well as those favoring it:

First Question.—Do you believe lacerations of the cervix uteri to be an important factor in uterine and pelvic disease?

Twenty-two out of thirty-four answer with an unqualified affirmative, while some modify, their assertion by saying, "most emphatically, especially if there be some eversion," or "subinvolution," or "chronic congestion," or "when extensively lacerated," or "only when a persistent focus of irritation." etc. Only one replied "no."

Second Question,—Do you believe fissures of the cervix uteri a cause of uterine or pelvic disease?

The majority answer, "sometimes;" eleven, "yes;" seven, "rarely;" two, "if deep;" four do not answer at all, and three, "no."

Third Question.—State your theory in what manner a lacerated cervix will or may cause disease of the uterus, its surrounding tissues, and in parts remote.

The substance of these answers is as follows:

- 1. Septic poisoning at the time of its occurrence.
- 2. It causes pelvic cellulitis.
- 3. It causes pelvic peritonitis.
- 4. It prevents involution.
- 5. It acts as a point of irritation.
- 6. It causes pelvic congestion.
- 7. It causes cervical and corporeal endometritis.
- 8. It causes profuse leucorrhoeal discharge.
- 9. It causes displacements of the uterus.
- 10. It causes erosions and eversion.
- 11. It causes hyperæmia of cervix as well as body.
- 12. It causes hyperplasia of cervix as well as body.
 - 13. It causes cystic degeneration.
- It causes numerous reflex symptoms, especially from irritating cicatricial contraction.
 - 15. It causes menorrhagia.
- 16. It causes sterility by preventing conception and causing abortion.
 - 18. It lays the foundation for epithelioma.

Fourth Question.—Do you believe laceration of the cervix a cause of sterility?

Seventeen answered "yes," and three "no," while others qualified an affirmative reply by saying "if extensive," "sometimes," "if there is

⁶Abstract of a paper read by E. G. Zinke, M. D., of Cincinnati, before the American Medical Association, May 1, 1855.

profuse catarrh or cicatricial contraction of the canal," etc.

Fifth Question.—Do you believe that Emmet's operation, if performed early and properly, will, to some extent or entirely, prevent uterine and pelvic disease?

Twenty answer affirmatively, one "it may do immense good," and several "to a great extent," "in well-chosen cases," or "if existing complications have to a great extent been cured by preparatory treatment." Only one gives a positive "no."

Sixth Question.—Do you believe that Emmet's operation is absolutely necessary in certain cases? If so, specify the class of cases?

The sum of the replies to this is, that the operation should be carefully and perfectly performed—

- When pathological changes exist which depend on the laceration, and which cannot be disposed of by other treatment.
- 2. When the laceration is deep, bilateral, or stellate, with a history of cancer even before secondary changes occur.
- 3. When in advanced age it prevents senile involution.
- 4. When subinvolution and cervical disease exists.
 - 5. Where there are large gaping rents.
- 6. Where there is villous degeneration of the endometrium.
 - 7. In menorrhagia.
 - 8. In habitual abortion.
- 9. To lessen the danger of cancer after the child-bearing period.
- 10. Where there is cicatricial tissue in the rents, causing reflex symptoms.

Seventh Question.—Do you believe every lacerated, not fissured, cervix, will cause eventually uterine and pelvic disease?

The greater number answered "no," or "not necessarily;" a few believed that the majority of the lacerations will. One states that "some escape by reason of unimpaired ligaments," and another that "some will heal over and never produce any symptoms whatever." Some said "only when extensive," and only two answered "yes."

Eighth Question.—If not, state approximately how many such cases you have observed?

Five answered, "quite a number, but by far the minority;" not a few have "kept no statistics, but have seen quite a number;" three "never;" one "six;" two "100 or more;" one "about 40;" one "over 50;" one says "impossible to do so;" four do not answer, and one "has seen many hundreds."

Ninth Question.—State approximately, or exactly if you can, how many times you have performed the operation?

Many have not the figures at hand, nor can they obtain them. Two, Byford, of Chicago, and Taylor, of Cincinnati, fail to report; but the number of operations made by Emmet, Thomas, Lyman, Byford, and Taylor, is estimated at about 1500 cases.

ł	Engleman, G. T. (about 40	to	5	0)		4.5	
į	Jackson, A. Reeves, about					200	
ł	Wilson, Ellwood, exactly .					128	6.6
l	Wilson, C. M., "					12	6.6
ļ	Nash, H. M., about					22	4 6
	Sutton, R. S., "						
į	Munde, P. F., "						6.6
I	Van der Warker, Ely, abou						6.6
i	Johnson, Jos. Taber, "					30	64
I	Hunter, J. B., at least					200	6.6
į	Prince, David, about (6 to						4.4
l	King, Willis P., exactly .						4.6
1	Palmer, C. D. (35 to 40).						66
1	Goodell, Wm., exactly						66
Į	Mann, Matthew D						6.6
Į	Baker, Wm. H., about						66
Į	Jenks, E. W., "						6.6
1	Reamy, Thad. A., exactly						6.6
l	Harvey, T. A						4.6
l	Murphy, P. J., about						4.4
١	Byrne, J., "						4.4
I	Lusk, W. T., "						4.4
١	Chrobok "						4.4
İ	Howard, W. T., "						4.6
Ì	Wylie, W. Gill, "						66
١	Barbour, A. H. T						
I	Duncan, J. Matthews						
ĺ	Duncan, o. matthews	۰		9			

Total No. operations, 30; cases, 4,945

Question 9a.—How often for the restoration of the cervix simply?

Nine answered "never;" one, "often as a prevention;" one, "three times;" one, "one time;" one, "25 times;" one, "50 times;" one, "one time after delivery, for hemorrhage from the circular artery." Six do not answer the question at all, and others, from various reasons, cannot state how many times.

Question 9b.—How often for the relief of pathological changes and reflex disturbances depending thereon?

Drs. Emmet and Thomas have both confessed that to-day they do not operate as frequently as formerly.

Tenth Question.—What have been your immediate results respecting union and relief?

Most of them answer, "good;" one "had four failures to unite;" one "failed to get union occasionally in his early practice;" another had failure of union in five operations; one had always a good result where the cicatricial tissue was removed thoroughly; one had five failures in two hundred cases. In one instance death occurred from septo-pyæmia, and in one from phlebitis.

Eleventh Question.—What have been your remote results respecting union, relief, and sterility?

One answers, Pregnancy occurred in twenty

One answers, Pregnancy occurred in five cases.

One answers, Pregnancy occurred in twenty-five

One answers, Pregnancy occurred in some cases.
One answers, Believe it cures instead of causing sterility.

One answers, Twelve confinements out of one hundred and twenty-eight cases, one twice, with recurrence of the tear.

One answers, Sterility cured in small number. One answers, Conception frequently followed.

One answers, Relieved large number of sterility.

One answers, Conception usually followed successful operation.

One answers, Not positive.

One answers, Highly satisfactory.

One answers, Impossible to say.

One answers, Very generally good.

One answers, Good.

One answers, Largely beneficial.

One answers, Cannot say.

One answers, Good in early failure in old cases.
One answers, Remote results better than immediate.

One answers, Excellent; conception quickly followed.

One answers, Saw ten cases in which sterility lasting several years seemed to have been cured. One answers, Good.

One answers, Not been able to follow all my cases; some have become pregnant.

One answers, Relieved a large number of sterility.

One answers, Two out of my seven cases have again borne children.

one answers, Sterility cured in a small number.

One answers, Good in overcoming sterility.

One answers, Cannot state definitely.

One answers, Good so far as a check upon tendency to abort.

Two say, "Unable to answer."

Twelfth Question.—When, in your opinion, is Emmet's operation contra-indicated?

The answers to this may be summed up as follows:

1. In acute or sub-acute inflammations.

- 2. In pelvic cellulitis.
- 3. In pelvic peritonitis.
- 4. In lymphadenitis.
- 5. When ovaries and tubes are diseased.
- 6. When the uterus is very irritable.
- 7. Never the rent co ipso.
- 8. Pregnancy.
- Menopause, if no eversion or hypertrophy exist.
 - 10. Manifest hydro- or pyo salphynx.
 - 11. When there is no ectropion.
- 12. When there are no nabothian bodies apparent.
- 13. When there are no symptoms of uterine origin.
- 14. Not needed in limited lacerations or fissures.
- 15. When local treatment gives relief.
- 16. When peri-uterine adhesions exist.
- 17. When uterus is immobile.
- 18. When there is neither eversion, local congestion, or reflex disturbance.
- 19. When there is cancer of the neck or body of the uterus.
- 20. When patient is suffering from pulmonary consumption or other grave malady.

Operations may be divided into three classes. Those who advocate operative interference in every lacerated cervix; those who do not endorse the operation at all; and those who deem it a necessity in some "well-selected cases" only.

That the operation is too often performed, that cases are operated upon in which no indications for it exist, that as a consequence the results looked for are not obtained, that the patients, so far from being relieved, are subjected unnecessarily to procedures not free from danger, and occasionally followed by unfavorable results, rendering the patient worse instead of better, is the opinion of many.

If a lacerated cervix is the cause of all the ills the text-books and authors attribute to it, then every rent in that portion of the womb ought to be sewed up.

We are compelled to admit that it is not true that every tear in the cervix is productive of evil, and that it is not good practice to stitch up every os simply and solely because it has sustained a slit; nor is it fair to assume that because certain diseased conditions co-exist in, around, or near the cervix or the uterus and its appendages an operation is necessary to a cure. I have arrived at the following conclusions:

1. It is evident that the operation has been performed unnecessarily for symptoms similar to, but other than those arising from lacerations of the cervix; further, that it has been done imperfectly, even without preliminary treatment, in many more; and the failure to give relief, as reported by several, is due to these two causes.

2. That from our present knowledge we cannot at this time arrive at any definite conclusion, from the fact that many of the so-called consequences of laceration of the cervix uteri are not settled beyond doubt.

3. That every one engaged in this department should carefully select his cases, and try every known means to give relief before recourse is had to operation.

4. The operation should never be performed eo ipso in cases of simple fissures or lacerations of first and second degree.

5. In cases of eversion and disease of the cervical and corporeal cavity, or both, although attended by hyperplasia and displacement, it has sometimes been observed that all the symptoms abated, that all the parts returned to their natural condition, and that no laceration was discoverable after the employment of alleviative measures alone.

6. That there are some cases of extensive lacerations of the cervix that seldom give rise to any inconvenience, and that, therefore, an operation should be deferred until symptoms arise that will call for its performance.

7. The operation, although indicated, should never be performed until, by preparatory treatment, the parts have been brought as far as possible into a healthy condition.

8. Near, and during, the climacteric period, the operation should be postponed as long as possible and the patient not be exposed to any risks, since in many cases all the symptoms subside under proper treatment and never return, on account of senile involution.

9. The operation is justifiable in cases of lacerations of the third and fourth degree, without complications, if there is a history of malignant disease in the family.

10. The operation may be performed with perfect propriety in young women as a preventative, if the laceration is bilateral and extends up to the cervico-vaginal junction or beyond it, even though there are no pathological changes; indeed, it seems to be the duty of every one who observes a lesion to that extent to urge an operation.

11. The operation is justifiable in any degree of laceration, and in rare instances, even in fissures, when there exists cicatricial tissue productive of reflex disturbances, annoying in character, and not tractable under any other treatment.

12. The operation is absolutely indicated in all extensive tears of the os, in which the cervix is everted, its mucous membrane and nabothian follicles diseased, and especially if there be granular or cystic degeneration present, provided the parts have first been restored to a healthy condition by palliative treatment.

METRORRHAGIA.

FY JAMES E. FREE, M. D., Of Emporium, Pa.

Metrorrhagia is a common disease in females, dependent upon morbid conditions which produce hemorrhage from the endometrium. Transient causes make most women liable to slight attacks occasionally, and spontaneous recovery is the rule; but sometimes the bloody discharge through the vagina becomes a source of weakness to both body and mind, and treatment prompt and effectual is demanded.

The loss of blood may be trivial, but the knowledge of even the slightest degree of flooding is sufficient to make a patient nervous and uneasy. Women will worry and fret about a few stains until they actually are bedfast, and it stands to reason that the amount of blood lost was not enough to account for the systemic depression often observed.

D. W. Cathell, M. D., of Baltimore, in his little volume entitled "The Physician Himself," urges the importance of treating the whole individual, and not merely his actual diseases. His ideas seem to us to be strong, for if we waited to administer drugs until sufficient reason existed for their employment, we would miss more than one opportunity of increasing our reputation and multiplying our influence. Women who are persuaded that they have a disease peculiar to their sex will say little in praise of the physician who attempts to gainsay them; what some seem to expect is a confirmation of their own diagnosis, and woe be to the one who refuses their reasonable request. It will do for the hoary-headed practitioner to turn up his nose at the whims of a lady patient, but the royal road to practice for the young man is to cultivate her good-will at all hazards. And there is no reason why a patient should not receive a prescription to soothe an agitated mind, provided the perturbation is strong enough to interfere with the healthy functions of any organ or set of organs. The best way to act in emergencies is to say little and give less medicine, largely diluted.

Confidence is a wonderful restorer: next to

l.

11

is

n

1.

ie

ıt

S

le

h

h

c-

is

7.

0

nt

n

le

18

1-

r

e

r-

ir

10

to

3,

1-

d

a

e

11

nt

n

8

at.

0

balmy sleep, it is tired nature's best friend; and whosoever has not had occasion to be profoundly thankful for the manifestation of this virtue in his patients, is not competent to speak on this subject. Suspicious patients who have no faith in drugs and doctors do not long trouble us; it is our friend who has implicit confidence in our skill, who catches at the straws we throw, to save himself from imaginary evils.

One of the commonest causes for metrorrhagia is exercise after child-birth. Subinvolution succeeds indiscreet conduct very often at this critical period, and the train of symptoms is as familiar as an old friend's face. Swelling, tenderness, pain in the pelvis and back, hemorrhage from the uterus, and jaundice, etc., ad infinitum.

In such a case, the first thing to be done is to obtain rest. Our old professor of gynæcology at the College of Physicians and Surgeons, Baltimore, used to repeat this injunction over and over, "Remove the cause," until the student who did not have at least one safe answer for some of his examination questions was in danger of hell-fire, to speak metaphorically. His rule works out in practice admirably, and in following his advice, and making a searching investigation into our cases, we have frequently stumbled upon discoveries.

All sorts and sizes of doses may be prescribed without attention to this cardinal point, and disheartening failure be still inevitable. Success is bought with a price. We are not justified in expecting to obtain the therapeutic effect ascribed to a remedy by the Materia Medica, without due regard to the conditions making it possible. When a course of treatment is adopted, with a medicine bearing a good reputation, the physician's judgment and the patient's common sense are at stake with it. A horse cannot trot against time with a weight on his back; neither can metrorrhagia be cured sometimes unless due regard is paid to surrounding circumstances.

If these two important considerations are attended to, namely, rest and the exciting cause, half the battle is won; as soon as the roots of a tree are cut the trunk and branches wither, and if we are able to dam the fountain, the stream soon runs dry.

Nothing is so inspiriting to a patient as to realize that the physician has a system about his management of the case in hand, and very few will remain intractable when they are given to understand that they must bear a share of the responsibility. It is well nigh impossible to get a sick person's mind off her disease for any length

of time, but it is possible to rouse a sluggish imagination by giving them something to do which will appear to have a direct bearing on their case, and such a consummation is devoutly to be wished.

The physician who makes a clear diagnosis of metrorrhagia and at the same time recognizes the valuable assistance which rest is ready to lend him, besides seeing the cause for the disturbance of the uterine functions, is most likely to have at his command the means to accomplish a cure.

One of the most useful medicines in metrorrhagia is bromide of potash. None of the bright and shining lights of the profession have recommended its use so far as we know, but great men are not always discoverers; they sometimes swell to immense proportions on borrowed fame. Nothing is surer than the therapeusis of bromide of potash and ergot in cases where some of the trouble arises from a strained condition of the sensorium. Ergot of course is our sheet-anchor, but it is not always the sine qua non.

We have before now succeeded in relieving a patient of a profuse hemorrhage by the use of morphia and bromide of potash: an overshadowing symptom in this case was cephalalgia, which yielded nicely in a few hours and was shortly afterwards followed by the disappearance of the metrorrhagia, but worse than either was the itching eruption which appeared and obstinately hung on for a month.

Neither ergot nor the bromides should be used for any length of time, on account of their well-known effect. It is our firm belief that more than one idiot in our asylums has been brought to his low estate through the use of this drug by the advice of medical men. An epileptic in this town has used a New York alienist's prescription for several years which contains several drams of the bromide daily, and each time he visits his adviser the dose is increased.

Gallic acid in combination with ergot is also reliable in metrorrhagia, but one objection, and a powerful one by the way, is its disagreeable taste. One of our patients took one teaspoonful, threw her bottle away, and recovered promptly. No better astringent can be found than gallic acid in some cases of hemorrhage. Last spring, we encountered a case of hemophilia, which baffled every combination of medicines suggested by several physicians, and finally was cured by forty grain doses of gallic acid. Viburnum has healing in its wings sometimes, but it is such a vilesmelling compound that we have abandoned its use wherever practicable. Quinine, ergotin, and ferri sulph. exsiccat. with gentian, makes an ex-

cellent formula for pills to be used in metror-rhagia.

A RARE COMPLICATION AFTER OVARI-OTOMY.*

BY C. D. PALMER, M. D.,

Professor of Gynæcology, Medical College of Ohio, Cincinnati, Ohio,

The speaker commenced by saying that details of the ordinary run of cases are now no new story. There occur, however, occasionally, unheard-of complications. These, for the better guidance of the surgeon and the perfection of the literature, should be not only mentioned, but recorded. With this object in view, he presents the following case:

Miss -, German descent, blonde, delicate organization. Noticed at the age of nineteen an abdominal tumor. This was three years ago. The tumor was central, regular, and uniform. A few months later, she consulted two physicians, who diagnosed Bright's disease, and tapped her. The abdomen completely collapsed. The process repeated itself, when the same diagnosis was made at one of our hospitals. She was again tapped with the same results. She was again tapped for the third time. At each of these tappings one and one-half bucketfuls were removed. The tappings were continued until eight in number, extending over a period of seventeen months. The fluid was at no time especially thick. Her last attendant, Dr. John Kellar, suspecting the true state might not be that of ascites, requested the author to see the case with him. The abdomen was found to be immensely distended. Fluctuation distinct, superficial, and uniform. was also dullness extending backwards to an unusual degree. Lateral decubitus showed a slight change in the area of dullness. No fluctuation could be felt in the posterior cul-de-sac. Patient anæmic and feeble. Pulse 120-130 per minute. Evening exacerbation of temperature. Menses absent for six months. The lower extremities ædematous and swollen, but no albumen in the urine. From these facts the diagnosis was made out to be ovarian cyst of the unilocular variety. In view, however, of the former diagnosis, and the fact that there were some obscure points in the history and physical signs, an exploratory incision was made. This confirmed the diagnosis. The general condition was the most unpromising for an ovariotomy. The hygienic surroundings

*Abstract of a paper read before the Ohio State Medical Society.

were also bad. The abdominal wall being opened, the cyst wall was found closely adherent in all directions to the abdominal parietes. When these adhesions were broken up as far as the finger could reach, a large amount of fluid began to flow through the abdominal opening. The source of this was found to be two lacerations, which entered the interior of the cyst. This opening was directly opposite to a cicatrix in the abdominal wall, and had been made by the repeated tappings. Through this some cystic fluid had doubtless flowed into the peritoneal cavity after some of these tappings, but subsequently its edges had been agglutinated by peritoneal adhesions to the abdominal walls. Two other smaller openings were also found. they were clamped with hemostatic forceps and the larger plugged by the large-sized ovariotomy trocar, through which the cyst was drained. This was almost completed before it was attempted to detach the cyst from the surroundings. The adhesions were short, thick, firm, numerous, and universal over the whole anterior and lateral abdominal walls, omentum, lower border of the stomach, and to a limited extent to the colon. They were broken up by steady traction on the cyst, dissecting with the handle of the scarpel. The pedicle attached to the right ovary was treated with transfixion with very strong, yet soft, carbolized silk, each section tied separately, and the entire stump tied by an additional wrapping. It was then cut off about one inch from the seat of ligation; after which a wedge-shaped section was cut out of the fore end and the peritoneal edges sewed together by a continuous stitch of catgut. The author practiced this method of dealing with the pedicle in his last five ovariotomies, all of which have proved successful. It is a method which possesses special advantages against secondary hemorrhage and septic poisoning. Oozing was controlled by hotwater sponging and the application of the thermocautery. The peritoneal cavity was cleansed of all blood, ascitic and cystic fluids by means of fresh, very soft carbolized sponges wrung out of hot water. The abdominal cavity was closed with silk sutures without drainage-tube. Hypodermics of brandy during the operation and brandy after it were made. The operation left the patient in a forlorn condition, but she improved during the day. All food was given per rectum for the first week. A low form of peritonitis commenced on the third day. It was attended with tympanitis and dyspnæa. Pulse 140, temperature 1030-1040 F. This condition things continued for one week.

III.

ed,

di-

ese

rer

OW

of

en-

287

nal

ip-

ad

ter

res

to

-me

th

he

he

oe-

he

k,

n-

m.

V-

by

he

to

th

on

an

nt

ad

8

d

st

C-

al

id

t.

0-

of

of

of

d

0-

d

ft

1-

T

On the eighth day a fatal termination from septic poisoning seemed (inevitable. The abdomen was opened by removing two stitches, and a rubbertube inserted, evacuating 8 to 10 ounces of fetid serum. The peritoneum was then washed out with weak carbolized warm water. Temperature fell 30 in two hours, and all other bad symptoms improved accordingly. These washings were continued for three days. The patient improved very much. Convalescence seemed established, and recovery seemed certain, when yet another complication appeared.

On the twelfth day a smell of gas with fecal odor was noticed at the opening made into the abdominal cavity. The next morning a small amount of fæcal matter was seen and removed. A fæcal fistula had formed. It seemed to communicate inwardly with the lower small intestine, while the external opening presented on the median line midway between the umbilious and the symphysis pubis. At first it discharged daily several ounces of liquid fæcal matter, and has continued to discharge since in quantities gradually diminishing and offensiveness growing less. The present quantity averages daily about two or three teaspoonfuls. The patient has readily improved, though convalescence was impeded by old stubborn diarrhea and bronchial catarrh. Phthisis was feared for a time, but for two months recovery has been complete, except for the fæcal fistula. It is possible that in the course of time this fistula may close spontaneously. No treatment for the fistula has been made except the regulation of the diet and the application of a firm compress. Surgical interference may yet be need-This occurrence is of interest and rarity. It is still a question as to how and when it occurred. Although ovarian cystic tumors may, by perforation of their walls and those of the intestine or stomach, discharge themselves into these cavities, there was no evidence that such was the state of affairs in this case. No one suspected that the intestine was injured at the time of the operation. These organs rested in their normal position, and on account of the great abdominal distension were compressed into the smallest space. The fæcal fistula appeared on the twelfth day after the operation, and four days after the abdominal cavity had been opened for drainage, and one day after the discontinuance of the intra-peritoneal injection. The most reasonable and plausible explanation would be that the intestinal perforation resulted from softening, from the peritonitis taking place from with-It is certainly fortunate that out inwardly.

the peritoneal cavity was opened when it was. The septic fluid remaining would certainly have led to a fatal issue, and it was well to afford an exit for the fæcal matter.

Baker Brown, in his "Ovarian Dropsy," gives examples for the various avenues for the escape of ovarian cystic fluid.

Instances of fæcal fistula after ovariotomy are related by Milner Moore (Lancet, p. 329, vol. i., 1880,) and Bantock (Lancet, p. 207, vol. i., 1879). Atlee, Peaslee, Simpson, Barnes, Thomas, Emmet, Goodell, and Tait, make no mention of any case. Spencer Wells refers to three cases, one of his own. This was the only one in his 1,000 ovariotomies. Mr. Bryant (Guy's Hospital Reports, 3d series, vol. xiv., p. 228,) reports an interesting case. These and other cases influenced Spencer Wells to make use of the extra-peritoneal method of dealing with the pedicle. Pauchin and Kuffrauth (Belgian Med. Press, 1880, xxxi., p. 217), and Kusswein (Centralblatt für Chirurgie, 1879, p. 630,) report cases.

It is remarkable that such perforations do not occur more frequently. The same may also be said of lacerations of the intestinal tube. The tumor is often adherent to the parts, and is separated from them with the greatest patience and skill. Bantock and Barnes (Lancet, 1877, vol. ii., p. 312) mention cases of this kind. Considering the facts, is it not posible that lacerations and perforations are accidents more common than supposed?

A REMARKABLE CASE.—THE IMPORTANCE OF EXPLORATORY INCISIONS.

> BY R. STANSBURY SUTTON, M. D., LL. D., Of Pittsburgh, Pa.

My rule of practice, with very few exceptions, has recently been to open the abdomen of every woman giving assent, when there was good reason to believe that the ovaries were unsound. In one case, a few months ago, I hesitated, for I thought that treatment might relieve the symptoms. This patient was spayed soon afterwards by my friend, Dr. Hunter, of the Woman's Hospital, New York, and the result was diseased ovaries. We are more likely, if careful, to err in not spaying than in spaying many doubtful cases. Exploratory incisions under proper precautions are almost absolutely safe, and there are many cases in which it is not possible to make a diagnosis without the incision. It does not require much diagnostic skill to say that abdominal section should be practiced in cases where the symptoms are patent, but no man living can always tell

h

sl

0

sl

tl

st

ej oj se

th per b th

c. T

g

S oud t

when and why this or that woman should be spayed to cure her of her mysterious malady. A safe operation and a safe place will simplify matters immensely if exploratory incision is resorted to. I never yet lost a woman from exploratory incision.

On May 7, 1885, Mrs. L., aged forty years, in very feeble health, was sent to me by Dr. Cook, of McDonald, Pa., for a lacerated cervix operation. Her youngest child, of which she had five, was five years old. Since weaning that child she had been a confirmed invalid. She had been treated by many physicians, in and out of private institutions, for womb disease, and no good came of it. She was very anæmic, walked with difficulty, and complained of pain in her left leg. Her courses were regular and not painful. Her nervousness was intense. On digital examination, the cervix was found lacerated on both sides. When she was brought fully under the anæsthetic, I found, by bimanual palpation, an ovary slightly enlarged and slightly prolapsed. I supposed it to be the right one. On the left side I thought I could detect the outline of the left ovary. Former experience and observations made at the side of Mr. Lawson Tait's operating table, told me that this was a case for the removal of the ovaries. Its sequel will prove that such cases should be, at least for some time to come, referred to specialstis. No speculum was introduced. The examination over, I wrote Dr. Cook, a most accomplished physician, that a lacerated cervix operation would not benefit the patient—that she must be spayed before relief would follow. He visited her and saw her with me here; and after further examination, coincided with me in regard to the operation. She returned home a few days later.

On June 8, nearly a month later, she returned, and was admitted to my private hospital for women. On June 10, in the presence of Dr. Cook and Dr. John P. Sterritt, I spayed her, taking both ovaries. My regular assistant, Dr. Stone, being absent, Dr. Cook assisted me. The operation lasted ten minutes; five minutes later the wound, $2\frac{1}{2}$ inches long, was closed with six silk-worm gut sutures. Her recovery was rapid, she was up and about on the twelfth day. Her highest temperature was 100° , six hours after operation; the next day it was 99° ; on the fifth day it was normal. Her pulse never reached 100 while on her back.

CONDITION OF THE OVARIES.

The right ovary was the size of a black walnut, and contained a roll of blonde hair, liquid fat, and a half tooth, the tooth as if cut in its long axis, the nerve cavity well formed

The left ovary was not quite as large, and contained three cysts filled with fluid; a fourth cyst burst as I drew the ovary up between my fingers.

My diagnosis was one, and probably two, diseased ovaries. I did not know what the disease was. It was not necessary to know that to decide upon the proper treatment. The result bore out the wisdom of the advice and operation. In this day of advanced knowledge it is most unscientific for a general surgeon to stand up before an audience of intelligent medical men and say, "I would always prefer to send my patients to a surgeon who could make a diagnosis without an exploratory incision."

An exact diagnosis of the disease in these ovaries was impossible. This was my thirtyfourth abdominal section, the one hundred and fifty-sixth I have witnessed. It was the twentyfirst done in my private hospital in the twentyone months it has been open. It was the eleventh ovariotomy, of whom ten have recovered and one died. Four times I have opened the abdomen in patients upon whose abdomens I never laid a finger until they were etherized and the abdomen was laid bare for operation. They had large growths; pregnancy was easily excluded; their countenances bore the diagnosis of ovarian cystomata as distinctly as the title of a book tells you the subject treated of. These patients all recovered. Timidity on the part of the patient is important; frighten her, and she may die. slight examination just before cutting will, if pregnancy is excluded, often set a skillful man right; if it does not, exploratory incision will. Hours spent over the diagnosis of many abdominal tumors are to the patient trying; the impressions they leave may after operation prove fatal. With too much handling cysts may, indeed often have, burst in the hands of the examiner. Professor von Billroth said to me on one occasion: "I formerly made much of the diagnosis; I don't care so much about it now before opening the abdomen."

MEDICAL SOCIETIES.

PHILADELPHIA NEUROLOGICAL SOCIETY.

A stated meeting was held April 27, 1885. The Vice-President, Dr. Chas. K. Mills, in the chair. Dr. Wharton Sinkler presented a patient suffering from what he thought might be called Friedrich's disease. Although differing from this affection in some respects, the main features are like it. He read the following history of the case:

Mary G., aged eleven years, eldest of five chil-

LIII.

con-

cyst

gers.

dis-

Sease

ecide

out

this

ntifie

udi-

46 I

rgeon

y in-

hese

irty-

and

nty-

nty-

enth

one

n in

d a

men

arge

heir

rsto-

you

cov-

im-

A

, if

man

vill.

mi-

res-

tal.

ften

Pro-

66 I

on't

ab-

i.

The

air. fer-

ed-

fec-

ike

nil-

dren; the others are all bealthy, and have had no nervous diseases. The parents are healthy, and neither they nor any ancestors they know of have had nervous affections or phthisis. Mary has had no other illness except measles, which she had since the present trouble began. October, 1882, the mother noticed that her hands were unsteady and that she dropped things; that she walked awkwardly, and often stumbled and fell. Her general health has remained good, but the incoördination of movement has steadily grown worse. At no time has there been pain of any kind in the limbs or body; no attacks of gastric disturbance, and no disorder of the bladder or rectum.

Present Condition .- It will be observed that in standing there is a swaying to and fro of the body, and that this is increased if the patient closes her eyes; apparently she would fall if she did not open the eyes. The movements of the hands seem awkward and badly directed, but she can

execute most movements.

The nutrition of the legs is good; in fact, they seemed so stout and hard that when first I saw the patient I suspected that it was a case of pseudo hypertrophic paralysis. She has, however, no loss of power, and can rise from a recumbent position on the floor with ease. The skin of the legs seems thicker than usual and closely adherent to the subjacent cellular tissue.

Sensation is undisturbed, and there is no

analgesia.

The patella reflex is absent. Papillary reflexes

fairly good.

Electrical Condition .- Examination by Dr. G. Betton Massey. To the faradic current the muscles of the legs and thighs respond normally. The response to the galvanic current is lessened quantitatively, but great pain is caused by this current. Speech is unaffected, and the intelligence is fairly good.

Dr. A. J. Parker demonstrated a Chinese brain.

CHICAGO MEDICAL SOCIETY.

Stated meeting, July 6, 1885. The first vicepresident, C. W. Purdy, M. D., in the chair.

Dr. Robert Tilley exhibited to the society microscopical specimens of the fungus aspergillus glaucus, taken from the human ear, an osteoma developed from the crusta petrosa of a canine tooth, and filaments, or mycelia, from the body of a tonsil.

While exhibiting the specimens, Dr. Tilley

as follows:

"In describing to you the three specimens which are exhibited under the microscope, I will refer in the first place to the fungus-aspergillus glaucus-taken from the human ear. I have had this in my possession for three years, and have shown it to several of my acquaintances, but did not deem it of sufficient interest to exhibit it before. It is, however, an object which many have not seen before, although it is mentioned in every text-book on the subject. I have no intention whatever of entering into the question of the aspergilli in general relative to their influence when found in the ear. But I must say that my experience relative to the question leads me to think that its influence as a source of pain in the

external ear is greatly exaggerated in the books. This specimen was taken from the posterior wall of the meatus of a little girl who had for some time previously been afflicted with otorrhea. The otorrhea had however ceased, and the fungi were readily recognized in lusty growth immediately on looking into the ear. There was, howately on looking into the ear. There was, how-ever, no pain complained of; the patient was brought rather for inspection than for the expectation of relief. You will observe that the fungi are growing on what by simple inspection might be called dry but otherwise normal wax. You will notice that the fungus consists of one straight long stem surmounted by a round ball, very much like the top of an onion which has run to seed. It is commonly said, I think rather on theory than on observation, that they are caused by sleeping in low, damp apartments. The child from whom this was taken belonged to people in good circumstances, and was well taken care of.

and was not living in damp quarters.

"The next specimen, to which I will now refer, is the osteoma developed from the cementum or crusta petrosa of a canine tooth. I am very sorry that I cannot give you anything of the clinical history, because I believe it would be interesting, if known. In consequence of this, it is perhaps necessary that I should give a word of explanation as to how it came into my hands. A friend was speaking to me of some one who had been subjected to the operation of drilling through the fangs of six teeth, on account of what was called 'ossification of the nerve.' In speaking to one of my acquaintances among the dentists about such a condition, I was presented with a tooth, a section of which I exhibit to you. You will see, both macroscopically as well as microscopically, that the line of demarcation is well defined. You will further see that the general appearance of the tumor is that of bone, and that it differs greatly from the general appearance of the tooth proper. It is interesting to observe, moreover, that the canal, through which the nerve and vessels enter, is greatly diminished in its course through the tumor, consequently great pressure must have been exerted on the nerve. Before making the section, I had supposed that the canal was completely obliterated, so small is its opening at the end of the tumor. On looking at the specimen through the microscope, you will see very clearly that while the line of demarcation between the dentine and the proliferation of the crusta petrosa is well marked, and the lacunæ and canaliculæ of the bony structure of the tumor are well demonstrated, there are also a number of contorted tubules in the bony tumor, which resemble somewhat the dental tubules. Haversian canals are of course not present; they never are in such growths.

"Although I have no clinical history to present, I may add that the usual clinical history is one of severe pain, which nothing but extraction seems capable of relieving. The last specimen is one which I obtained from one of those little pockets which are often found in the tonsils. They seem to come and go, sometimes without giving any more inconvenience than a little discomfort. They are frequently associated with fœtid breath, and in some cases the masses themselves are very offensive (in odor). In the present case,

however, this was not so, there was no feetor. I anæsthetic, a vaso-motor constrictor, causing con-There was, however, an unpleasant sensation | traction of the arterioles and depletion of the amounting to a positive discomfort running down the neck externally, in the direction of the sternocleido-mastoid (muscle). On pressure around the base, the little mass popped out, suddenly, so that it came near going down the patient's throat. In examining it, under the microscope, it proved to be one mass of filaments, very fine, and containg spores in the body of the filaments, and associated with fat crystals.

"I succeeded in staining them with methyl violet, but only after first extracting the fat with

"I have no theory to present, gentlemen; I simply exhibit to you what has been interesting to me. After the removal of the small mass I did not think any treatment was necessary; but as there was a little bridge of tissue more or less dividing the cavity into two sections, I divided the bridge with the electro-cautery."

The Treatment of Acute Coryza

was the subject of a paper by Dr. J. A. Robinson. He said the literature on the subject of the treatment of acute coryza is scanty and of a stereotyped nature. The profession seems to have arrived at two conclusions; first, that it is not a disease of sufficient severity and importance to command especial attention; second, that no plan of abortive or curative treatment has been sufficiently successful to cause them to investigate the subject further. However, in view of the fact that repeated attacks of acute coryza undoubtedly have a causal relation to pathological changes in the nares which it is difficult to remove, and that we are so frequently consulted by public speakers and singers who beseech us to abort or rapidly cure such acute attacks, it certainly deserves more than a passing notice.

The time-honored plan of aborting an acute coryza by the administration of a full dose of opium, an active purge, and a potent diaphoretic, has proven more disagreeable than efficacious. The plan, advocated by Dr. Ferrier, of blowing into the anterior nares a powder composed of morphia, bismuth and acacia, has been quite satisfactory in a few instances, but it is not free from the objection that, when successful, it often produces an unpleasant nausea. Its success is undoubtedly due to the sedative and astringent effect upon the

inflamed mucous membrane.

What are the pathological conditions in the first stage of acute coryza? Briefly, there is dilatation of the capillary vessels, the arterioles being dilated and the venules engorged, inducing tumefaction of the mucous membrane. This is accompanied by dryness and pain. Secretion is abolished. In reflecting upon these circumstances the thought naturally arises, whether, if we can employ such measures or drugs as will antagonize these abnormal states, we will succeed in aborting the disease. We have recently had added to our armamentarium a drug which more completely antagonizes in its physiological actions those pathological conditions than any other. It is the hydrochlorate of cocaine.

Its physiological actions have been demonstrated to be concisely as follows: when applied to a mucous membrane it is a potent although transient

venules, thus rapidly emptying congested tissues of a surplus of blood. This drug is also an astringent and has the property of lessening the secretion of muciparous glands. On studying the relation between the state of the nasal mucous membrane in the first stage of acute inflammation. and after an application of cocaine, the theory was formulated that cocaine should prove useful in aborting acute coryza, and it was determined to try it on the first opportunity.

The details of the first experiment are as fol-

Miss S--, a soprano singer in one of our city churches, applied to me on the morning of February 22, and desired immediate relief from a "cold in the head." She complained that the previous night she had been exposed to a draft and awoke that morning with the cold, as evidenced by the fact that she could not breathe through the nose, and that her nose felt dry and painful, and she had lost the sense of smell. Inasmuch as she had to sing that night at a special service, she must have immediate relief.

Upon examination I found all the conditions incident to the incipiency of an acute coryza. temperature was 1020 F., with some acceleration

of the pulse.

Febrifuges and a mild diaphoretic were prescribed. A local application of a four per cent. solution of hydrochlorate of cocaine was applied, as thoroughly as possible, to the congested mucous membrane, and the parts were sprayed, also, for some time with a warm alkaline spray, hoping thereby to reduce the hyperæmia. After having made another application of the cocaine, the patient was instructed to return home and follow the same line of treatment and to return the following day. She did not return until three days later, when she reported, to my surprise and gratification, that she had been able to sing as desired, and that no symptoms of the disease had returned.

The success which attended this new departure, induced me to try it in other cases of acute coryza which were seen early, and it has almost always been successful. Of course, the number of cases which we see in their forming stage are few, on account of the fact that the patients do not seek medical advice for this affection until the disease is well advanced.

In the use of cocaine for the purpose of aborting an acute coryza there are some objections; it has to be applied often in order to maintain its action on the inflamed mucous membrane, and it is an expensive drug. I have found that the use of a warm alkaline spray serves to prolong the sedative action of the cocaine.

Of course dependence is not to be placed on local measures alone, but in addition proper attention is to be given to constitutional and hygenic

Dr. Tilley said he had used the hydrochlorate of cocaine in two or three cases of acute coryza with much satisfaction. According to one patient, an attack had ended with a single application. While he did not look upon cocaine as a sure cure for acute coryza, he thought it almost always did good. He referred to a serious accident which Periscope.

LIII

g conof the

issnes

m as-

dying

ucons

ation.

heory

seful

nined

is fol-

r city

Feb-

om a

t the

draft evieathe

and

In-

pecial

s in-

Her ation

precent.

lied.

also, ping

ving

pallow

fol-

days

and

g as

ure, ryza

vays ases , on seek

ease

ort-

; it

its

d it the

ong

on

at-

enic

rate

yza

ent,

ion. ure

did

ich

occurred to one of his patients during the use of | The patient was a boy aged twelve cocaine. years, in whose nose a little cocaine had been used. After the first application he suffered a little nausea, which was not regarded as serious; after the second application the nausea was worse, but it was not until a third application had been made that the symptoms became alarming. These symptoms were difficulty of breathing, syncope, irregular action of the heart, cold perspiration and loss of sensation in the extremities. Notwithstanding these symptoms were alarming, the boy recovered quite rapidly. He had noticed reports of cases in the journals where the same

symptoms had appeared. Dr. Weller said that he had had a good deal of experience in the use of coca, especially in the form of the fluid extract. He had taken large doses; in his own case he had used two pounds in a short time. Formerly he had considered it as harmless as tea, but latterly he had arrived at the conclusion that it is a powerful narcotic. The strange phenomena which follow use of cocaine in some cases, he believes to be due to the narcotic action of the drug, and that they would no appear if the drug was not given in large doses. He believed some patients to be peculiarly susceptible to the action of coca or cocaine, similar to the idiosyncrasies of patients in the use of belladonna, opium, and alcohol. In the case mentioned, he believed the symptoms to have been the result of an overdose of cocaine. In his experience, he had found a two per cent. solution of cocaine strong enough, and urged the tentative use of the drug in the same manner as in the use

of morphia.

Dr. Webster did not wish to be considered skeptical, but he had some doubt as to the alarming symptoms in the cases mentioned having been due to the drug. Is it not possible they were the result of reflex processes in over-sensitive patients? He had a patient recently who vomited after holding a fever thermometer under her

Dr. Paoli believed that the old treatment of acute coryza by giving the patient a hot bath, muriate of ammonia internally, and inhalations of camphor in hot water, or the oil of eucalpytus, combined with borax, was the best, although rewould acknowledge that cocaine would often he lieve severe attacks in a short time.

Dr. S. J. Jones asked the author of the paper if he had used cocaine with a steam atomizer in acute pharyngitis, tonsillitis, and laryngitis; also, if the applications of cocaine to different patients were from the same solutions, and at brief intervals, so as to be able to state how a reliable solu-

tion acted on different patients.

Dr. Robinson, in closing the discussion, said he . did not advocate the plan of treatment as infallible or free from objections, nor did he neglect to use other means of cure if he thought they were advisable. As to the effect of cocaine on certain patients, he had similar experience to Dr. Tilley in the case of a woman who had twice been operated on without cocaine for nasal polyps. No unfavorable symptoms occurred during these operations. At the third and fourth operations cocaine was used, and the patient was troubled with nausea, vomiting, palpitation of the heart, and syncope. As no cocaine had been used in the first two operations, these symptoms in the third and fourth operations seemed to be, undoubtedly, due to an idiosyncrasy of the patient. He had not used cocaine with the steam atomizer, but he thought it feasible if the drug were not so expensive. He prepares fresh solutions for each patient, so as to preclude all possibility of failure of action by reason of deterioration of the solution by age. He had found the same package of cocaine to vary in its local and constitutional effect on different patients, affecting some more rapidly and profoundly than others.

Society then adjourned.

Editorial Department.

Periscope.

The Relations of Skin Diseases to Marriage. Dr. A. H. Ohmann-Dumesnil thus writes in the

St. Louis Med. and Surg. Jour.: Marriage and syphilis has been so thoroughly discussed and so much attention has been paid to it, not only by syphilographers, but by the pro-fession in general, that all the phases of the ques-tion have been considered. Despite this, all authorities are by no means united in their conclusions, although all agree that, during certain stages of the disease, marriage is entirely pre-cluded. That syphilis is hereditary and transmissible is acknowledged by all who have had any experience whatever in the observation and treatment of the disease. Those physicians who have paid any considerable attention to insanity and affections of the nervous system, claim for many forms of the neuroses, if not a direct trans-

mission, at least a hereditary tendency to the same or allied forms of nervous lesions, derived from one or both parents. Rheumatism, gout, hemophilia, phthisis, and a number of other general affections, are accused by a number of experienced writers to have that power in them by which the patient will hand down the peculiar susceptibility to those diseases to his unlucky progeny. On the other hand, some very respectable authorities deny heredity as such, while acknowledging that the physical weakness is perpetuated.

A few of the more common, and at the same time most troublesome diseases of the skin will be briefly noticed in this paper, and an attempt made to point out the probable chance of their reappearing in the offspring, together with the reasons why patients suffering from certain dermatoses should, if not entirely give up marriage, at least postpone that relation until circumstances justify such a course. As a prefatory remark it

may be stated that it is not necessary for the mother or father to be the recipient of the trouble from the consort in order that the child may be the subject of the disease.

It is not the local manifestations of the disease that constitute the active factor, but rather the general condition of the entire economy of one of the progenitors, which has undergone certain more or less profound changes which manifest themselves more or less distinctly upon the external surface of the body, as a sort of danger signal; and, generally, there are certain appearances connected with these lesions that, to him who can read, constitute a fair index of the sever-

ity of the existing condition.

It is manifestly obvious that a person suffering from an infectious or contagious disease should not marry during the active period of the trouble. No one afflicted with any one of the parasitic diseases would object to submitting to a proper course of treatment before marrying. But there are some troubles of the skin which, although we may admit that they are neither contagious nor directly transmissible, or only rarely so, are sufficiently dangerous, in this respect, to awaken our attention and deserve more study. It will be noted that the extreme views of the French and German schools of dermatology have been avoided, as we are not willing to admit, on the one hand, the universal constitutional nature of all dermatic affections; nor will we, on the other, concede that they are all purely local and due, almost without exception, to external causes alone. For this reason, whatever authorities we have consulted are chiefly those occupying what we consider the most rational position, which is one situated midway between the two extremes, and from those who are willing to let theory bend

The object of these few remarks is not so much to uphold a theory as to inquire whether there may not be enough in the question of the heredity of skin diseases or the predisposition thereto, to make it of some moment to the medical practitioner who may be questioned as to such being a

bar to marriage.

Eczema is by far the most common, and, unfortunately, it often becomes the most intractable of the troubles afflicting the skin. When first studied, the disease was for a long time regarded as purely local; then it was admitted by a large number that it might be somewhat dependent upon internal causes. Its heredity was denied in toto at first. We find that, later on, in speaking of the etiology of this protean disease some authors acknowledge having seen a few -a very few-cases which they considered hered-The latest work on the subject, and one itary. which we, as Americans, are proud to point to, is Bulkley's sterling work. He says*: "But, on the other hand, although the disease appears to come by direct inheritance in but few cases, it is still true that in a certain number it is seen to be hereditary, and whole families are sometimes affected, not only in one generation but in several." . . . Again, "Scrofula or struma undoubtedly appears as a predisposing cause of eczema in the way of inheritance, quite as affectually as when existing in the individual." Van Harlingen, Piffard, Liveing, Duhring, E. Wilson, and even Neumann, acknowledge that, in some cases, the disease is undoubtedly hereditary. There is also a greater probability of its being transmitted if it exists as an old, chronic, and intractable form of the disease in the parent.

The next most common affection which we meet with in practice is, no doubt, psoriasis. This disease is acknowledged by all authors of any prominence to be hereditary. It is contended, however, by a number of recent observers that the heredity is more marked, or more liable to be seen, if one or both parents have had the disease in a marked and recurrent form. In those cases in which it assumes the "universal" form, it is pretty certain that the offspring of the affected parent will either exhibit the same disease or some allied cutaneous affection.

Lupus vulgaris, whose pathology is as yet involved in more or less obscurity, is another one of those dermatic affections which would seem to be transmitted from parent to child. We will not inquire whether the neoplasm which constitutes it is scrofulous, tubercular, or of some other origin. Any one of these causes is sufficiently impressed upon the constitution of the progenitor to involve that of the progeny by direct inherit-

ance.

Ichthyosis, espscially of that variety known as "ichthyosis hystrix," is undoubtedly an hereditary affection, or, rather, deformity. There is no single author who has ever observed any number of cases, limited though it be, who has not immediately had his attention called to this important fact. It would be useless here to advert to the dicta of the many dermatologists who have expressed an opinion upon the subject. The disease is undoubtedly the most markedly hereditary one with which we are acquainted.

Lepra, or true leprosy, whether it be dependent upon a bacillus or not, is transmissible from parent to child. Although no well-authenticated cases exist to show that it has been acquired by contagion, or that its bacillus has been successfully inoculated, examples of its occurrence in families which have continued leprous for several generations are numerous and well attested. Whether the primary cause be climatic or para-

sitic, the fact of its heredity remains.

Chronic pruritus has been observed in a mother, her daughter and granddaughter, as detailed in the Journal of Cutaneous and Venereal Diseases, February, 1885, by Dr. Wm. J. Maynard. An interesting fact in connection with this is that the male members escaped.

Sarcoma and carcinoma of the skin are further examples—of a malignant type of disease—of dermatoses which are transmissible from genera-

tion to generation.

The writer has observed cases of vitiligo in which the trouble was transmitted to the offspring apparently. Not only was there a reappearance of the disease in the children, but all were affected in a manner similar to that of the parent, and identical parts were the first to be involved in the process.

We know well that the color of the skin is very susceptible of being transmitted to the children, and we daily observe such as the result of

^{*}Second edition, p. 93.

III.

an

on.

me

rv.

ng

in-

eet is-

m-

whe

be

ise

ses

ia

ed

or

n.

of

be

ot

es

lv

it-

as

d-

is

n.

ot

nrt

re

30

ie

nt.

d

y

n

ì-

r,

n

s,

e

f

u

g

mixed intercourse. Each race has certain pigmentary peculiarities of the skin, which, by some process or other, seem to be stamped upon the child to a greater or less degree. In certain families we find that a lock of white hair in a particular locality is transmitted from generation to generation, just as other peculiarities or deformities are. Often, again, whole generations escape, and the "sign" reappears upon a remote descendant, showing that although this peculiar force may become latent, it does not necessarily lose any of its strength on that account, as all those acquainted with the facts of atavism know.

A cursory glance at these various examples would seem to indicate that heredity plays a very unimportant part in the genesis of skin diseases. But when we take into consideration the small amount of care taken, not only to trace diseases back to their origin, but also the inability to follow the various successions through different generations, the amount of evidence offered acquires more force than would be at first accorded to it. Besides this, the cause can often be recognized as being some condition which has shown itself in different ways, and only evidence itself as a skin disease in the last member of a long line of individuals. Were our observers to pay more attentention to this subject, there is no doubt whatever that the role played by heredity would be found to be much more important than it is regarded at the present time.

As a natural conclusion, it will follow that, if certain skin diseases are directly transmissible, or if the causes thereof are, marriage between individuals affected with these troubles, whether the disease be confined to one or both of the high contracting parties, should be very carefully considered, if not prohibited. Before permitting such an union to take place, the dermatic genealogy should be carefully examined, and all the possibilities conscientiously weighed. The intention of this paper is rather to call attention to a few isolated facts, and to direct observation to a new point in connection with the etiology of skin diseases, which may prove serviceable in the prevention of a number of the most intractable and chronic affections which afflict the human skin. There is no doubt whatever that the more these relations are sought after the more often will they be found, and enable the physician to give safe and reliable advice in those cases where it will be needed or sought.

Sterility in Man After Syphilis.

Dr. Edm. Goldman thus writes in the Texas Courier-Record of Medicine, February, 1885:

During my sojourn in Mexico I had the opportunity of making some observations concerning syphilis, which I did not find in the other parts of the world, where I have practiced or studied, and among these, one of more than ordinary interest, the one to which I wish to devote the following remarks—namely, sterility in man after and in consequence of syphilis.

The strangest part of my observation, however, is this, that I have met with this constitutional defect only in men of the Caucasian race, who were at one time infected by Mexican women of the Indian type. Syphilis in a Mexican of the Indian or mixed race is quite a different affection,

as to its violence of character and length of duration, from what it is if transplanted, so to say, upon a foreign soil.

My attention was called to this years ago by that excellent authority, Dr. Fred. Herff, of San Antonio, and I have found it confirmed in all cases that came under my treatment. I have witnessed rigors of such a severe order before the appearance of the macular eruption, that they resembled the algid stage of pernicious fever. The anæmia and cachexia, which followed the syphilitic infection, manifest and develop themselves more rapidly and extensively; and repeatedly did I find myself obliged to desist from applying the subcutaneous injection of a very diluted solution of corrosive sublimate with albumen, because this insignificant operation produced too severe a shock, a proof how seriously the nervous system of my patients was involved.

In women of the indigenous race, the symptoms are comparatively mild, and the disease with them runs generally an almost latent course. I once was requested to see a Mexican prostitute who had infected quite a number of young men, some of whom I had under my treatment. Instead of finding her a wreck, as some of her victims were, she had the appearance as though she enjoyed unimpaired health. It has repeatedly occurred to me that from Mexican prostitutes might have originated the severe cases of syphilis which gave so much trouble to Malgaigne when he accompanied the French army into Spain. Mexico at that time formed a part of the Spanish kingdom, and it is not unlikely that a great many prostitutes flocked to that country on account of the war. The Spaniards at one time pretended that syphilis was first brought into their country from Mexico. This is not in conformity with historical facts. The celebrated poem on syphilis, by Fracastor, was published in the year 1521, after a regular epidemic had swept over southern and western Europe, and in Virchow's work on the same subject there is a still older poem mentioned, written in 1496, by a Venetian by the name of Sumaripa. The conquest of Mexico took place during the year 1520-21, which proves that syphilis existed in Europe long before.

But of one thing there exists no doubt in my mind, that the Spaniards who were infected by the Mexican women, after they had taken possession of that country, had so much severer trials to endure than they were accustomed to see in Europe, that for this reason they considered it a new disease. In our days, although we have more ample means at hand to combat diseases, thanks to the progress of modern science, syphilis is and remains a most formidable and stubborn disease, if a white man becomes infected by a Mexican woman of Indian blood. I have seen but one case of a white woman infected by a Mexican of the Indian type, but this one case convinced me that the same holds good as to the female sex, although it is a well known fact that the disease is generally much easier endured by women than by men.

In Europe and in this country, if a man suffers from constitutional syphilis and fecundates an ovum within a healthy woman, it is most probable that abortus of the fecundated ovum will

take place. In other cases the ovum may develop to maturity and terminate either in the birth of a still-born child with an eruption of pemphygus over its body, or an offspring living and showing the outward symptoms of syphilis, while in a small minority they manifest themselves at a later date. In Mexico I have hardly ever seen a syphilitic child born, but I have seen cases in which the disease appeared several months later. This I could only observe with Mexicans of the mixed race. I have met, how ever, quite a number of white men belonging to the Germanic or Saxon race, and Mexicans of pure Caucasian lineage, who remained without off-spring, whose wives never conceived at all, and consequently never bore children or miscarried them. All those men had suffered long and severely from syphilis contracted from Mexican prostitutes. None of these men bear any signs or symptoms of the disease which once existed : they are in every respect healthy subjects, their virile power is not by any means extinct, only their power of propagating is lost; none of them infected their wives. Several of these men are now married in second matrimony for several years after they had been bereft of their first wives, and the result has been the same-no off-

spring. I call your attention to the fact that a total absence of virile power, for a limited time however, has frequently been observed after typhoid fever, although the patients had passed long before through their convalescence. In these cases it is probably a paresis of the spermatic plexus of nerves which causes the temporary suspension of the functions of the organs of reproduction, and therefore it is quite a different state of affairs. In syphilis there are other causes, which may combine to deprive the semen of the male of its power of fecundating. We find, for example, that after other exhausting diseases the hair of the scalp may fall, but it returns after a certain time to its former state; while after syphilis we observe very often that the loss of the hair is permanent, or, at least, it never is restored to its pristine state. This would point in the direction of either an atrophy, or degeneration of the papille of the hair. Moreover, we find, as a sequel, amyloid degeneration of the glandular This degeneration extends always from organs. the walls of the finest arterioles into the parenchyma. It does not destroy the functions of the glands, but alters their products. For example, the bile and urine of persons thus affected show a different chemical composition to some extent from the normal state, the former being at the same time lighter, the latter darker of color. The amyloid degeneration is in reality the remnant of an infiltration or exudation, which, instead of passing through the fatty degenerations and subsequent reabsorbtion, remains in statu quo, enveloping the cells, and by means of its pressure or lesser permeability impedes the process of exosmosis, and thereupon the perfectly physiological production of the glands. Thus, similarly to what we observed in the bile and urine, as mentioned before, the product of the sexual glands is probably altered in the case of sterility alluded to. The spermatic liquid is either deficient in its composition or the spermatozoa do not possess the vitality and energy of their vibratory motion, which is required to carry them to their point of descination. It appears to me most probable that a qualitative or quantitative deficiency of protagon, which is generally considered to be the substance possessing the catalytic force in the human semen, might be the cause of the sterility in question.

I was not enabled to make more extensive researches in this interesting matter, although I consider it worthy of some careful investigation. The partial amyloid degeneration of the parenchyma of the testicles suggested itself to me as the most plausible explanation.

Oleate of Copper in Tinea Capitis.

Among the parasitic skin diseases, few are more annoying to the patient, or whose treatment is often so unsatisfactory and perplexing to the physician, than the affection popularly known as scald head. So says Dr. Robert Boal in the Peoria Med. Mo. for May. Its appearance is so familiar and well marked that any description of it is unnecessary. Nor can it be mistaken for any other affection. It is called by various names, trycophytosis capitis, tinea circinatis, tinea capitis, and others, all these names having reference to the parasite which produces these changes on the skin. The great difficulty in curing many cases largely depends upon the depth and extent to which the parasite has propagated itself. If its ravages are confined to the surface of the skin, and do not reach the hair follicles, any of the ordinary parasiticides will generally arrest the disease; or juniper tea, sulphur, and other remedies of that class will suffice. But if the parasite has burrowed down into the hair follicles, stronger remedies will be required. The milder agents which have been named may cause a temporary improvement by destroying the parasites upon the surface, while those that are under it, and in the hair follicles, are not reached. The remedy which he has found to most effectually destroy these deeply hidden parasites is the cleate of copper. His attention was called to this preparation some two years ago, in a paragraph in one of the medical journals, and he determined to give it a trial upon the first opportunity.

Last year he was called to see a patient 17 years of age, well-formed, robust, and in apparent good health. He found the entire scalp covered with large, branny scabs, from beneath which a discharge had issued which became hardened by the contact of the air, the hairs were broken off, and looked like stubble. They had lost their glistening appearance, were dry, and apparently dead. The eruption not only covered the entire scalp, but extended down to the upper side of the face, and over the ears. It was one of the worst and most unpromising cases he had ever seen. Nearly all of the ordinary germicides had been tried without avail, under other hands. He determined to use the cleate of copper. An ointment of cosmoline containing 20 per cent. of the cleate was applied twice a day, having previously gently removed all the detached and partially detached branny scabs with a hair-brush. Under this treatment the case began to improve, and at the end of three weeks the scalp assumed a healthy appearance, the hair grew rapidly, and II.

of

rv

to

lly

at-

he

re-

I

n.

n-

98

re

is

y-

28

he

80

of

ny

es.

pi-

ice

on

ny

ent

If

in,

he

he

ne-

ite

zer

nts

rv

on

in

oy

op-

on

he

a

17

ar-

ov-

th

rd-

ere

ad

nd

red

per

of

ad

les

ds.

An

of

re-

ar-

sh.

ve.

nd

the disease was cured. More than a year has elapsed since that time, and there is no return of the disease. The cleic acid, with which the copper is combined, seems to have the power to penetrate to the depth of the hair follicles, laden with the copper, a combination which effectually destroys the parasite.

No constitutional treatment was used or required. The ointment should be well but gently rubbed upon the parts, once or twice a day, as required. In most cases an ointment containing from 10 to 15 per cent. of the oleate of copper will be strong enough. In his opinion this is one of the most efficient remedies we possess in this troublesome and disagreeable affection. He shall use it in the future as in the past, with more confidence than any other remedy, and he does not hesitate to recommend a trial of it to others.

Vitiligo.

Before the Ohio State Medical Society Dr. R. Harvey Reed, of Mansfield, read a paper on this

subject, saying:

"Prof. Duhring defines this cutaneous disease as an acquired disease, consisting of one or more sharply defined, rounded, or irregularly shaped, variously sized and distributed, smooth, whitish spots, whose borders usually show an increase in the normal amount of pigmentation. In an analysis of 11,000 cases by Dr. McCall Anderson, he only met with four cases of vitiligo. It is not confined to sex, but is probably more frequently found in early adult life. The pathologists tell us there is an increase of pigment over the body, but in the author's experience it seems to prefer the hands, face, neck, and head. Microscopically it is found that in the one instance there is a remarkable increase of coloring matter of the skin which gives rise to the peculiar mottled or spotted appearance of the skin. All authors agree in a favorable prognosis. It is usually easily distinguished from morphæa chloasma, tinea versicolor, The author gave in tabulated form and lentigo. the differential diagnosis of these diseases.

"In his experience the treatment has been very unsatisfactory. The use of internal remedies is only valuable when the system is out of order. In the belief which generally prevails, that vitiligo is a nervous affection, he has used the hypophosphites combined with strychnia internally, associated with friction and frequent bathing, together with stimulating lotions or ointments, such as the bichloride, or mercury and rose-water, or hydrarg. ammon., combined with unguent aqua rosa, but none of these were followed with beneficial results. The only remedy giving any apparent benefit was electricity used twice a week, one pole applied to the nape of the neck, brushing the parts with the other. A report of five

cases followed.

"If this disease is a nervous affection, it is certainly located somewhere in the great sympathetic system, and by some disturbance of that interferes with the blood in its distribution of the pigment to certain parts of the derma. In the cases reported, it seems to have started in all but one in the right side, and in that it could not be stated. Author thinks causes are located solely in the nervous system. There is a possibility

that a primary cause may exist in the capillaries themselves, or in that part of the derma in which

the pigment is deposited.

"Until there is more light thrown on this interesting disease, which it is hoped this paper will call out, and a definite knowledge obtained in regard to its exact pathology by practical demonstration, the author, for one, will continue to believe it to be a purely nervous disease, under protest."

On the Conditions which Precede Keloid, and on Some Rare Forms of that Disease.

Mr. Jonathan Hutchinson contributes an able paper on this subject to the London Med. Times (May 23), which concludes with the following propositions:

That with keloid, as with other skin diseases, we must not expect too close a conformity to

the type form.

That for clinical convenience we may recognize several varieties of keloid, the prognosis as to spontaneous disappearance and proneness to return after excision differing much in each.

3. That the first and most typical form is that in which keloid begins in very small, perhaps forgotten scars, and slowly spreads far beyond their limits into sound skin. In most cases the extension and duration are indefinite; and the hardness, glossiness, abruptness of outline, etc., are always well marked. The proneness to recur very quickly after excision is very great in these.

4. That in the second group, in which keloid

4. That in the second group, in which keloid growth begins in the middle of large scars, such as those of burns, it is seldom so well characterized. It often does not extend beyond the scar, and often, especially in young persons, soon begins to soften again and to gradually disappear.

gins to soften again and to gradually disappear.
5. That in a third form the keloid growth is deeper, and never produces the glossy, superficial, elevated, and spurred patches which occur in the others. These cases are very slow, and show but little tendency to spontaneous disappearance. They do not develop in connection with large scars, but rather with inflammatory damage to the skin. They are less prone than the others to recur after excision.

6. That although definite scars almost invariably precede the formation of keloid, yet that there are allied conditions which result rather from inflammation after injury than from any-

thing which is demonstrable as cicatrix.
7. That the cases of multiple keloid prove either that there is in some persons a remarkable tendency to the disease, or that primary patches have the power of infecting the blood and producing others.

8. That there is little or no clinical proof of tendency on the part of keloid to pass into cancer.

—M. Henry Milne Edwards, the celebrated naturalist, is rather in a delicate state of health, and, owing to his great age (he being eighty-five), his condition causes some anxiety to his friends. M. Alphonse Milne-Edwards, son of the above gentleman, was lately elected member of the Academy of Medicine, and, like his father, is also a distinguished naturalist and member of the Academy of Sciences.

THE

Medical and Surgical Reporter, A WEEKLY JOURNAL,

ISSUED EVERY SATURDAY.

D. G. BRINTON, M. D.,
JOSEPH F. EDWARDS, M. D.,
EDITORS.

The terms of subscription to the serial publications of this office are as follows, payable in advance:—

Med. and Surg. Reporter (weekly),	2 1	vear.		\$5.00
Quarterly Compendium of Med. Sci				2.50
Reporter and Compendium	-	-	-	6.00
Physician's Daily Pocket Record,				1.50
Reporter and Pocket Record, -	-	-	-	6.25
Reporter, Comp. and Pocket Record	ı,			7.00

For advertising terms address the office.

Marriages, Deaths, and Personals are inserted free of charge.

All letters should be addressed, and all checks and postal orders drawn to order of

D G. BRINTON, M. D., 115 South Seventh Street, PHILADELPHIA, PA.

THE

QUARTERLY COMPENDIUM

OF

MEDICAL SCIENCE.

The attention of our readers is especially called at this season to the **QUARTERLY COM- PENDIUM**, which we publish.

It is, in fact, a supplement to the RE-PORTER, being made up of articles which have not appeared in the weekly, but yet are of value and interest to the physician.

It contains about 150 pages of reading matter in each number, and the whole four numbers, embracing 600 pages of choice material, will be sent to paid-up subscribers to the **REPORTER** for the very moderate price of

ONE DOLLAR,

in advance, for the year.

Address

DR. D. G. BRINTON,

115 South Seventh Street,

PHILADELPHIA.

THE ABSORPTION OF MERCURY.

There are but few subjects which have given rise to as much discussion as the absorption of metallic salts, especially, however, of mercurial preparations, by the intact skin. At the last meeting of the Balneological Society of Berlin, in March of this year (Deutsche Med. Zeit., April 6, 1885), the subject came up for debate, and it was shown that science has made a great deal of progress in this respect during the last year. As the results of some investigations, which will be published in future, were mentioned at this meeting by their authors, we have made in the following an extract of the same, especially as they definitely settle some long-mooted questions con erning the power which the intact skin possesses of absorbing mercurial and other salts.

The President, Dr. Liebreich, well known by his introduction of hydrate of chloral into our therapeutics, reported that his investigations had convinced him that corrosive sublimate is absorbed by the healthy skin, if the mercurial salt be incorporated in a warm bath; and what is very peculiar, and has thus far not yet been known, is that but very little of the absorbed drug passes out by the kidneys, but most of it is found in the intestinal canal, whence it leaves with the fæces.

The fact had long been recognized that in poisoning by corrosive sublimate, the kidneys soon ceased their function, the uriniferous tubules being found clogged up with a whitish mass, which for a long time was believed to be the mercurial salt. Dr. Zuelzer has discovered that in such cases of poisoning the corrosive sublimate finds its way into the bones—the latter use a great amount of their lime salts—and it is these lime salts, which, being removed from the circulation by the kidneys, accumulate in the uriniferous tubules and obstruct their passage.

In Middeldorpf's clinic, in Breslau, the first trials were made to cure goitre by inducing absorption of iodine by electrolizing iodide of potassium directly over the goitre.

Dr. Liebreich has for some years been using at his lectures at the University of Berlin a small apparatus invented by the late Prof. Burns. To Ш

ven

of of

rial

last

in 1 6.

was

oro-

the

nb-

ing

ing

efi-

rn-

of

by

our

had

bed

in-

pe-

, is

ses

the

ces.

ois-

oon

be-

ich

rial

ich

its

ant

lts,

the

les

rst

ab-

as-

at

all

To

show students absorption by electrolysis, he lays bare the masseters of a rabbit, and applying jodide of potassium on the one side, he obtains a deposit of free iodine on the other.

We may consider, therefore, the following facts as proven: Corrosive sublimate and some other metallic salts, if kept in solution and added to a warm bath in which the patient lies, is absorbed by the intact skin. Most of it leaves the body by the alimentary canal, and not by the kidneys. In cases of poisoning, either by a single too large dosis, or by medical administration too long continued, the mercurial salts are deposited in the bones-a fact for many years denied, and looked upon as a superstition left over from the Middle Ages-the bones becoming deficient mainly in lime salts, which are extracted from the blood by the kidneys, and there choke up the fine tubules, the white deposit in these cases not being fat, as once believed.

DEATH FROM A SNAKE-BITE.

Although many cases of deaths from snake-bite are yearly reported in the daily papers, they usually happen where original research is not abundant and medical aid sometimes not even near. This may be the reason why there are comparatively but few cases of death from snake-bite on record in which a careful post-mortem examination had revealed the morbid changes. The article recently published by Dr. A. Romiti (Arch. Ital. de Biol., Tom. v., Fasc. 1, 1885,) is, therefore, of interest, as it concerns a case of the kind mentioned.

A workman, who had tried to catch a snake (Vipera Redü) in the woods, was bitten by it twice in the dorsal surface of his right hand. He at once fainted; his skin was covered with a cold, clammy perspiration; the impulse of the heart diminished in frequency, and could scarcely be felt; vomiting ensued; the tissues around the wound began to swell in a high degree, and although a ligature was applied, aqua ammonia dropped into the wound and administered internally, and thorough cauterization practiced with Paquelin's apparatus, deep coma soon set in, and

four hours after the bite the patient died from asphyxia.

The case is remarkable in more than one point. First, cases of death from a bite of the viper are not frequent; amongst 200 bitten by the snake. and suffering from the consequences of the poisoning, but two died according to the statistics of Boullet. But the other interesting point is the one already mentioned-the exhaustive macroand microscopical examination after death, and the result exactly coincides with the observations hitherto made upon animals experimented upon.

The pupils were dilated. The alveolar and muscular tissue surrounding the wound was infiltrated with a sanguinolent fluid. contained in the veins of the arm was black. The lungs were hyperæmic. The heart had stopped in diastole. The pancreas was soft and of a yellowish color. Upon the lower surface of the liver many ecchymotic spots of various sizes were discovered. The same observation was made on the kidneys, which besides were soft, and their cortical substance hyperæmic. Microscopically a beginning interstitial nephritis could be demonstrated.

The intestinal mucous membrane was decidedly injected and full of ecchymoses. An examination of the blood showed the red corpuscles intact, but they were paler and formed no rouleaux. Amongst the red, white corpusles with granular contents were found. Thirty cubic etm. of this blood, injected into the peritoneal cavity of a guinea pig produced no symptoms of poisoning whatever. Some of the blood, after having been kept for a period of five months in hermetically closed vessels, was still fluid and evinced not the least odor of decomposition.

Notes and Comments.

Various Applications of Muriate of Cocaine.

The field of usefulness of cocaine seems daily to enlarge. Dr. Barette, in Le Concours Médicale, May 23, 1885, reports a series of cases showing the various modes of application of this drug.

Grynfeld, of Montpellier, had to introduce the catheter in a man, aged twenty-seven years, whose urethra was exceedingly sensitive, in fact, so irritable that the moment the instrument entered the channel the severest pains and a muscular spasm prevented its further introduction. G. then injected about one fluid drachm of a five per cent. cocaine solution into the urethra. Immediately after, the instrument could be introduced with ease and without giving rise to the least sensation. According to G., the cocaine in these cases causes not only perfect anæsthesia of the urethra, but it also completely prevents the febrile excitement due to increased sensitiveness of the parts, and, therefore, of reflex character.

A woman, aged sixty-nine years, presented in the bulbar region of the urethra a very hard and oval tumor. The application of the metallic bougie convinced G. of the presence of a calculus. After dilatation of the meatus, a four per cent. solution of muriate of cocaine was injected into the bladder; and later, the same kind of solution was directed against the parts where the calculus was situated. The latter was surrounded by soft parts. A few minutes passed by, when the soft parts could be divided and the calculus extracted without the patient's having experienced the least annoying sensation. Cure complete. The case indicates the employment of cocaine in lithotripsy.

Dr. Estery, in Bédarrieux, was consulted by a man æt. 70, who suffered from an epithelioma of the size of a cherry on the left jaw. E. injected 2 grains of cocaine, dissolved in water, under the skin, at the base of the tumor. Five minutes later, complete anæsthesia had set in within a radius of one inch from the tumor. The incision into the skin and the excision of the malignant growth were performed without giving rise in the patient to any pain whatever. But when the operator touched the areolar tissue below the tumor the pain was decidedly felt. This case seems to prove that the anæsthesia, when thus produced, does not extend very far.

Dr. Barrette, however, cautions against too forcible injections into the external meatus, and relates the case of a patient suffering from purulent discharge, accompanied by excessive pains, especially at night. Other remedies having been tried in vain, a four per cent. solution of muriate of cocaine was resorted to, and injected with great force into the ear. A minute later all pain had ceased, but within about ten minutes the most excruciating pains developed themselves, and an examination instituted the next morning revealed the disagreeable fact that a grave inflammation of a purulent character of the inner ear

had set in, a morbid condition which had not previously existed. Barrette also mentions some other cases in literature where forcible injections of fluid into the external auditory meatus were followed by the gravest consequences. The tympanum in these eases often easily yields, and some of the pus is thus carried into the inner ear, where it at once gives rise to the same purulent inflammation that had existed more externally. As there anyhow does not seem to be any special benefit to be derived from them, it is better to discard such injections altogether.

Equinia Mitis.

Dr. Benjamin Strachan thus writes in the Brit. Med. Jour.:

Some weeks ago, I had under treatment a carter, aged about forty-five, whose ailment seemed to come under the above category. About six weeks before I saw him, he had been working an old horse affected with grease, and bad occasion frequently to manipulate the diseased parts; and, for some time before taking to his bed, he had suffered from what he took to be rheumatic pains in various parts of his body. At last he was obliged to give up work, from the severity of the pain in the lumbar region and along the course of the right sciatic nerve; and, after two days in bed, an eruption appeared on the outer aspect of the right leg, extending from about six inches above the knee to within four inches of the ankle-joint, and partially invading the popliteal region. This consisted, at first, of large and small bullæ, speedily succeeded by a profuse eruption of pustules, arranged in small clusters upon a base, which speedily swelled, presenting the appearance of a large crop of small carbuncles, which discharged pus, and some of them cores, through perforations of the skin, where the pustules had been. These perforations had the appearance as if the skin had been riddled with pellets. Immediately before and during the earlier period of the eruption, the leg was much inflamed and swollen, and there was considerable pyrexia, with severe headache, nansea, and sleeplessness. The glands in the right groin were tender and swollen for some days, but did not cause much trouble. There were only one or two more inflamed pustules on other parts of the body, and I was inclined to regard it as a form of herpes zoster, aggravated by equinia poisoning. That it was infectious, was soon proved by his wife, who attended upon him, being attacked by it, though less severely. An angry pustule appeared upon the back of one of her little fingers,

attended with great pain, redness, and swelling, which began rapidly to extend over the hand, but was checked by a free incision over the pustule, followed by fomentations and poultices. This was succeeded by an erysipelatous blush round the left eye, with a small abseess over the inner canthus. The husband was confined to his bed for three weeks, but has now entirely recovered. The treatment in his case was iron and quinine, and chloral, with linseed and charcoal poultices, and carbolic and lead lotions. The wife, although feeling much out of sorts, was never laid up.

.111.

pre-

ome

ions

vere

ym-

and

ear,

lent

lly.

cial

dis-

Brit.

t a

ent

ont

rk-

ad

sed

his

be

At

se-

ng

ter

the

om

nr

ng

of

a

all

re-

all

of

n,

ns

d-

r-

as

n-

a,

in

id

or

10

of

g.

is

y

Conception without the Appearance of the Menstrual Flow.

As a matter of interest we note the following case which Dr. Arthur Oakes reports in the *Brit*. *Med. Jour.*, June 13:

Mrs. -, aged about 30, married about six years, has been delivered at full time of three bealthy children, and is now pregnant with a fourth. She menstruated quite regularly and naturally before marriage, and for a few periods after. Since then she has had no menstrual discharge whatsoever, nor, indeed, any appreciable discharge of any kind from the vagina, except the lochia, which were natural in quantity and duration. She had no connection with her husband for some weeks after the cessation of the lochia. Her first child was born about twelve months after marriage, and she suckled it until it was fifteen months old, until, as she says herself, she felt sick in the morning and knew she was pregnant again. The same thing has occurred with each child, menstruation never having been re-established since she was pregnant with the first. Having questioned and observed the woman very closely, I think it impossible to entertain any doubt of the correctness of her statement. A well authenticated case, such as I consider this to be, shows pretty clearly that there cannot be that intimate relation between ovulation and menstruation that some authors seem to think. Ovulation can undoubtedly occur without menstruation (as in this case), and we know the menstrual flow does occur without ovulation, as in cases where menstruation has occurred after amputation of both ovaries.

Poisoned by Tincture of Digitalis.

Le Concouer Médical, May 23, 1885, publishes an observation of Dr. Jeanton, resident physician in Hospital Saint Louis, concerning a case of poisoning by three fluid ounces of the tincture of digi-

talis. The whole quantity had been swallowed at once by the servant girl of an apothecary. Within a few minutes intense vomiting set in, and it is probable that a large portion of the poison was thus eliminated, and another part by emetics, which were administered at the hospital, whither the patient was at once carried. The symptoms which later developed themselves, may be placed in two groups, one attributable to the gastritis (intolerance of the organ, pairs in the epigastric region), and the other produced by the disturbance of circulation, which would probably have been far more severe had assistance not come at once; irregularity and slowness of the pulse, but mainly nervous troubles, as violent delirium, necessitating the application of active measures, cutaneous hyperæsthesia and muscular hemiparesis, vertigo, amblyopia, and xanthopsia.

The eighth day the cure was complete, no sequela whatever apparently remaining. Besides the treatment mentioned, stimulants were mainly employed, as, for instance, hypodermic injections of ether, administration of carbonate of ammonia, inhalation of aqua ammoniæ, strychnia, and later, iron, external stimulating frictions, application of electricity, atropia, and a carefully regulated diet as soon as the irritability of the stomach ceased.

Starvation and Suspended Animation.

Dr. Edward Berdoe reports the following case in the Lancet, June 23: He was called on, April 29, 1885, to see a man named Samuel B ____, aged seventy-four. He found him lying on the floor insensible and dying. His wife sat near him, and on being questioned admitted that he had been lying in the same position for six days without food, drink, or any attention whatever. On raising him to place him on the bed, part of the flesh of his face adhered to the floor and was torn off. The exact form of the patient was marked on the floor by the exudation from the skin. He was in a most filthy state, and though unable to swallow even liquids, lived about fourteen hours after the first visit. By the coroner's order a post-mortem was made. The body was fearfully emaciated, and all the parts that had been in contact with the floor were gangrenous. The organs presented the usual appearances of death from starvation, but the medical interest of the case was found in the condition of the heart. This was enormously hypertrophied and dilated; all the vessels were atheromatous, and there was a large aneurism of the arch of the aorta. The cardiac condition seemed to satisfactorily clear up some of the difficulties of the case. From the evidence at the inquest it is probable that the wife's statement was correct, that he had fallen down "in a fainting fit" six days previous to the visit, and had not moved or spoken since. The heart presumably beat with just sufficient force to keep the respiratory organs going; this was, of course, favored by the recumbent position. The case is interesting from a medico-legal point of view, as showing how long a person may live in a state of syncope.

Hysteria in the Male.

M. Charcot has recently devoted some of his clinical lectures at the Salpêtrière to the study of six cases of hysteria observed in male patients. He classed, under hysteria, the affection known as railway-spine and railway-brain, a classification recognized as just by Putnam and Walton, of America, and Page, of England. M. Charcot quoted from their works. From 1875 to 1880, five doctoral theses have been written on hysteria in man. M. Klein, the author of one of these theses, collects 80 cases. M. Batault has collected 218, of which nine are M. Charcot's patients. M. Charcot told his pupils that hysteria in male subjects is not rare. It is an affection that is misunderstood and often overlooked. If it be occasionally recognized in weak young men of an effeminate type, who have suffered intense emotion, it is not admitted that a strong vigorous workman is susceptible to hysteria. Yet examples have been furnished by stokers after a railway ac-Dr. Charcot attributes the ignorance concerning this neurotic affection in man to a false appreciation of it in female patients. In male patients, hysteria lasts a long time, and the symptoms are durable; with women, the contrary is the case. This difference leads those who have not a thorough knowledge of this neurosis to overlook its appearance among male patients. Even women sometimes present hysterical phenomena that remain permanent, which are difficult to modify, and sometimes resist all medical treatment.

Gastrotomy.

The Berlin correspondent of the Brit. Med. Jour., July 4, 1885, writes:

The following case of removal of a foreign body from the stomach was reported in a recent sitting of the Dresden District Medical Society by Dr. Credé: A man aged twenty-five, of delicate frame, came into his clinic after having swallowed, a fortnight previously, the wholeset of the teeth of his upper jaw. He had pushed the teeth down his throat

because they were choking him, as he could not bring them up again. As they did not pass naturally, and signs of inflammation of the stomach became visible, Dr. Credé performed the operation. A diagonal cut fifteen centimèters long was made below the ribs, the stomach was taken out, and opened by a cut seven centimètres long in the centre of its anterior aspect; the set of teeth was removed, and the rent in the stomach sewn up by three sutures, one above the other. The stomach was then replaced in its proper position. There was no inflammation, discharge, or pain of any kind. The second day after the operation the patient received liquid nourishment, and after a fortnight solid food. In three weeks he was dismissed, and was able to resume his work. This is the second case of a set of teeth that had been swallowed being removed by an operation. and the seventh in which gastrotomy was resorted to. The greater number of cases were successful. The first three cases were those in which a knife, a spoon, and a fork, respectively, had been swallowed.

Recovery from Rupture of the Uterus.

On April 27, 1884, Dr. Walter Buchanan (Brit. Med. Jour., July 11, 1885,) was called to attend Mrs. K., with her second child. On his arrival she had one pain, and then a sudden cessation. On examination, he found the head of the child impacted in the pelvis (labor had only existed about two hours). He then gave a dose of liquor ergotæ, and attempted to deliver with forceps. Finding he was not successful, he sent for his friend, Mr. H. Tribe, who managed, with the utmost difficulty, to deliver her in about fifteen minutes. The placenta followed almost immediately, also an immense amount of hemorrhage. On examining the uterus, they found an extensive rupture of the fundus, through which the hand passed, and they could feel the intestines and spleen. They gave brandy and ether, and also at intervals injected subcutaneously a drachm of sulphuric ether. She seemed to be moribund. She was pulseless and blanched; the pupils were fixed and dilated. They persisted with ergot and ether, and remained during the night, expecting every moment that death would ensue. To their great surprise, she rallied; on the next day, still more so. She was fed on brandy and milk, and ergot was administered every three hours. On the third and fourth days, she had persistent diarrhæa, which was with difficulty overcome by compound chalk mixture. After this, she made a rapid recovery, being about in three weeks.

III.

not

at-

ach

ra-

vas

ut.

the

vas

up

he

on.

of

ion

ter

vas

rk.

ad

on.

ted

nl.

fe,

al-

rit.

nd

val

on.

ild

ed

or

ps.

his

at-

en

di-

ge.

n-

he

ies

nd

m

d.

re

nd

ng

eir

ill

nd

he

ar-

m-

The Relation Between Gonorrhœa and Ophthalmia Neonatorum.

The London Med. Times, July 11, 1885, tells us that Drs. Leopold and Wessel, contribute to the Archiv für Gynäkologie (Band xxiv., Heft 1,) a paper which, if the facts contained in it are confirmed by other observers, is a very important one. That the ophthalmia of the new-born is due to inoculation of purulent discharge from the mother's vagina is commonly accepted. It is also commonly believed that it is next to impossible to be positive whether a purulent vaginal discharge is gonorrheal or not. Leopold and Wessel have not been content to rest in this inexactness. In eighteen cases of pregnant women with purulent vaginal discharge they examined this secretion for the gonococcus of Neisser. In seventeen of them none were present; no precautions were taken to prevent the infants of these seventeen from getting ophthalmia, but none of them suffered from it. In one case Neisser's gonococci were found without doubt; the child from this woman on the fourth day had ophthalmia. These researches go to show that we have in the gonococcus of Neisser a certain test of gonorrhea; and that gonorrhoea is the actual and true cause of ophthalmia neonatorum; two general propositions, which, if corroborated, are distinct strides in our knowledge.

Urari in Tetanus.

Before the Academy of Medicine in Ireland, Mr. McArdle read the notes of a case of acute traumatic tetanus, in which two-third grain doses of urari every fifth hour resulted in a cure, the more remarkable effects produced by the abovenamed doses being relaxation of the contracted muscles in from six to ten minutes after administration, very rapid and tumultuous action of the heart, cyanosis, labored breathing, and dilatation of the pupils. Once the patient was sufficiently ander the influence of urari, the evacuations from the bowels were regular. Mr. McArdle suggested the combination of urari with pilocarpine, in the hope that the cardiac and respiratory trouble produced by the former might be prevented by the latter. He also showed that urari, to be of service, must be used in large doses, and that the drug is cumulative.

Olive Oil as a Menstruum to Dissolve Cocaine for Use in the Eye.

Dr. Jos. A. Andrews thus writes to the Med. Record, July 18:

"In addition to the occasional benefit derived from the use of oil dropped into the eye in recent abrasions from burns, and in other painful affections of the cornea in which atropia is indicated and cocaine may likewise be serviceable, the plan of dissolving the cocaine in oil seems to insure a longer contact of the remedy, and a smaller quantity is required to affect anæsthesia. Neither the salt of cocaine or that of atropine is soluble in olive-oil, but the alkaloid dissolves readily in this menstruum without the addition of alcohol, it being only necessary to expose the solution for a few minutes to a gentle heat in a water-bath. Castor-oil is not a desirable menstruum on account of its irritating qualities; and the oleate of cocaine, for the same reason, is still more objectionable as an application to the eye."

CORRESPONDENCE.

The Cause of Phlebitis.

EDS. MED. AND SURG. REPORTER:-

As one of the constant readers of your excellent journal, it becomes me to express my satisfaction with the variety and amount of information contained in its numerous articles; and not least satisfactory among them are the reports of clinical lectures by the various professors who enlighten their hearers, and through the reports, Their opportunities for seeing a vour readers. large number of cases are so much superior to ours that, even if we sometimes differ in opinion from them, it is with the mental reservation of our opinions in deference to their experience and standing. And so they set us to thinking, perhaps to experimenting, and sometimes to chang-

But sometimes we get staggered. been taught, and believe, certain things, and we are loth to have our supposed knowledge shown We have no opinion to express to be ignorance. with reference to hospital therapeutics, however freely we might discuss the treatment of disease in the country and smaller cities; but when the subject is physiological or etiological, where there is a common basis for opinion, we cannot accept the dictum of any one unless it favorably appeals

to our reason.

In a late number of the MEDICAL AND SURGICAL REPORTER a report is given of a clinical lecture on phlebitis, in which the etiology is discussed and a statement made which does not strike us

favorably. Here is the statement:

"Suppose that the inflammation of the vein is not a local trouble, * * * how may it be caused? The other cause is the transference of a septic embolus to a pocket of the vein. Suppose you have a dysentery, there is ulceration of the bowel, and phlebitis occurs, what is its probable cause? In an inflamed vein in the neighborhood of the ulcer a thrombus has formed, which in turn has given off an embolus, which in a large majority This passes into a vein of the of cases is septic. extremity, creates irritation, and produces septic phle-

Now we are taught that the direction of the

venous blood-current is always toward the heart (with the single exception of the pulmonary circulation); that, arrived at the heart, all the blood passes through the pulmonary capillaries, thence, by way of the heart and arteries, through the peripheral capillaries into the veins, so that there can be no direct passage of an embolus from a vein of the abdomen to an extremity-it must pass through two sets of capillaries to find such a lodgment. Is not such an embolus rather refined? The capillaries are very small. Eliminate its alleged septic character, and it is hard to imagine its irritating power. But eliminate the embolus and leave the septic poison, and we can hardly argue that it may not be a predisposing cause, which may be determined locally by some trivial blow or pressure which escapes notice entirely. Possibly the pressure of one leg thrown over the other for a certain length of time, producing retardation of flow, might suffice; and as the right is probably oftener thrown across the left, it may account for the greater frequency on the left side.

But we did not start out to theorize. The professor's explanation did not satisfy us. If we are wrong, let our doubts be explained away and the truth made plain.

O. A. Dean, M. D.

Beloit, Wis., July 25, 1885.

Fatal Hemorrhage from the Umbi.ical Cord.

EDS. MED. AND SURG. REPORTER:-

On the very oppressive evening of the 21st of July I was called to attend young Mrs. H—, primipara. The head presented in the first anterior position, and my patient, although somewhat excited by the experience of her first parturition, was safely and naturally delivered, after suffering about eight hours.

The child, owing to the rather slow progress of the second stage, and because it may have been a couple of weeks premature, seemed somewhat feeble when born; but, after a little attention, respiration was well established, and I proceeded

to tie the cord.

As has always been my custom, I had requested beforehand that for this purpose there should be secured a piece of white braid about oue-sixteenth

of an inch in width.

I examined the funis, which seemed natural in appearance, without hernial tendency, and, after stripping it slightly in the direction of the placenta, tied it about an inch and a half away from the navel, drawing the ligature as tightly as possible. After placing a second ligature, I cut the cord, and then, examining for some seconds the stump, and wiping its cut surface off clean with my thumb, seeing there was no disposition to even the slightest oozing, I handed the child to a woman in attendance, and she, wrapping it in a large clean sheet, laid it down until ready for dressing.

Believing the child was all right, having carefully attended to the mother, I prepared a navelrag, and telling the nurse how to put it on, I went down-stairs with the intention of departing soon. A few minutes later, I was hastily sum-

moned to see the child.

The nurse, on taking it up, had discovered in the sheet large quantities of blood, say perhaps three or four ounces, and the child was found exsanguine and gasping. In spite of position and stimulation, it died about twenty minutes subsevuently, and what had promised to be a most successful accouchement, was changed at once to a very disappointing one.

The cord, as soon as the hemorrhage was observed, was examined. The ligature was intact. The button-like stump was stained all over, as if from general oozing, but no blood was then escaping, syncope having occurred. I placed, however, then a second ligature, although entirely unnescessary, as there was no subsequent bleeding.

Now, I have been thus, perhaps, unnecessarily concise in describing my case, with the view of inviting criticism of my treatment. I must say, however, that I did in this case just as I have done in hundreds before it, and shall possibly do hereafter, except that I shall in future watch the navel very carefully. Twice before, in my practice of twentythree years, I have been called to apply a second ligature to stop bleeding, soon after the child was separated from the placenta, and neither child died. In my fatal case, the ligature was very firmly drawn, and seemed, as I have said, sufficient. In conclusion, I may say I know of no theory to account for the fatal occrrrence except that the child may have been born with a hemorrhagic diathesis, which betrayed its existence by secondary bleeding, in spite of a firmly-applied J. GILBERT YOUNG, M. D. ligature.

1000 Shackamaxon street, Philadelphia.

How to Take a Pill.

EDS. MED. AND SURG. REPORTER:-

I have just read in your issue of July 25, "How to Take a Pill," by Dr. Asthalter.

Now if the pills are sugar-coated, his method does very well; but if they are not, the patient will generally get the bad taste of the pill, and this is really the most serious objection to pills. You know that in the vast majority of cases the pills are not coated. When a physician orders medicine in pills, the apothecary does not sugarcoat them.

I will describe to you a method that I have been using, which I discovered last year, which carries the pill down without the patient feeling its presence in the mouth or throat, and never permits the pill to be tasted, when it is not coated.

Take a swallow of water, and hold the head back, so that the water will be in the back of the mouth. Do not swallow the water until the pill has been dropped on its surface. Take the pill between finger and thumb (still holding head back) and carry it well back, without touching the inside of the mouth with it; then drop in on the water and swallow. The head will come forward, and the water opening and wetting the cooplagus takes the pill instantly to stomach. It does not "stop half-way down," and is not tasted. Try it.

305 Stevens street, Camden, N. J.

Action of Calomel on Conjunctiva.

EDS. MED. AND SURG. REPORTER :-

In the REPORTER of July 11, Dr. C. S. Turnbull accounts for the caustic action of calomel on the conjunctiva by the "well-known fact that

most samples of calomel contain free corrosive But the same result follows the local use of absolutely pure calomel, and the internal use of iodine or the iodides at the same time. Under these circumstances I have seen severe ulceration result from the application of calomel to a patch of herpes præputialis. F. R. MILLARD, M. D.

San Diego, Cal.

News and Miscellany.

An Argument in Favor of the Restriction of Chinese Emigration.

When we, of the East, hear of the violent opposition to the ingress of the Chinese from our brethren of the Pacific slope, we generally accredit this opposition to mercenary motives; but when we read the following lengthy abstract from the Dailu Examiner of San Francisco (July 21), we are not only horrified, but we are tempted to utter a most fervent prayer that these filthy scoundrels may not be allowed to increase among us. We quote as follows:

"The special committee appointed in February last to investigate the condition of Chinatown presented a lengthy report, from which the following

extracts are taken:

"ASPECT OF CHINATOWN.

"When your committee commenced their investigations, they were impressed with the fact that the general aspect of the streets and habitations was filthy in the extreme, and so long as they remained in that condition, so long would they stand as a constant menace to the welfare of society, as a slumbering pest, likely at any time to generate and spread disease, should the city be visited by an epidemic in any virulent form. Your committee are still of the opinion that it constitutes a continued source of danger of this character, and probably always will, so long as it is inhabited by people of the Mongolian race. They are glad to be able to say, however, that the presence and operation of the surveyors since employed by them have had a most salutary effect -whether lasting or not-in inducing 'a general cleaning up' where filth was the rule before, until a better general aspect is now presented than was the case at the time when this investigation began. Knowing the peculiar habits of this people, it is not likely that this better condition of things will continue long, now that the operations of the surveyors employed by your committee have been concluded, or that anything better will follow than a relapse back into their more dense condition of nastiness, in which they apparently delight to exist. Nevertheless, something has been gained in the demonstration of the fact that by constant watching and close supervision the residents of Chinatown can be made to adopt somewhat better habits, and become less obnoxious-on this score, at least—as well as a lesser source of danger to the public health; and, therefore, it is perhaps well to inquire now whether it will not be wise to inaugurate new rules and a new policy, under which they must be brought, if they are to continue to remain among us. In speaking thus of the improvement that has taken place in the gen-

eral appearance of Chinatown since your committee commenced its investigations, we would not be understood as saying that the condition of the locality is in any sense what it should be in point of cleanliness. Our effort is to point out the fact that, as compared with what it was four months ago, it presents an improved aspect. ence is one of degree, however, and even in its bettered aspect, in its byways, its slums, and its purlieus, its habitations, some of its places of business and places of amusements, it is to-day the filthiest spot inhabited by men, women, and children on the American continent. All great cities have their slums and localities where filth, disease, crime, and misery abound; but in the very best aspect which Chinatown can be made to present, it must stand apart, conspicuous and beyond them all in the extreme degree of all these horrible attributes, the rankest outgrowth of human degradation that can be found upon this con-Here it may be truly said that human tinent. beings exist under conditions (as regards their mode of life and the air they breathe) scarcely one degree above those under which the rats of our water front and other vermin live, breathe, and have their being. And this order of things seems inseparable from the very nature of the race, and probably must be accepted and borne with-must be endured, if it cannot be curedrestricted and looked after, so far as possible, with unceasing vigilance, so that whatever of benefit, of degree,' even, that may be derived from such modification of the evil of their presence among us, may at least be attained, not daring to hope that there can be any radical remedy for the great, overshadowing evil which Chinese immigration has inflicted upon this people.

"CHINESE POPULATION.

"No known method of census taking has ever yet sufficed to furnish an approximate idea even of the numbers of our Chinese population. It is believed that the system which has been adopted in the conduct of this investigation will result in establishing a more correct conclusion on this point, so far as the twelve blocks covered by it are concerned, than can be obtained through any other method. Every building in this district has been visited, examined, and measured; the number of rooms which each contains, and the number of bunks or sleeping accommodations given in the report furnished your committee by its surveyors, and certainly with approximate accuracy, the number of men, women, and children of Chinese origin who sleep in this district, is now known and is herewith given. On this basis, and through this system of computation, we are enabled to show what we believe is a fair return of the population of the district referred to. Your committee have found, both from their own and individual observations, and from the reports of their surveyors, that it is almost the universal custom among the Chinese to herd together as compactly as possible, both as regards living and sleeping rooms and sleeping accommodations. is almost an invariable rule that every 'bunk' in Chinatown (beds being almost unknown in that locality) is occupied by two persons. Not only is this true, but in very many instances these bunks are again occupied by 'relays' in the

How

_111,

ex-

and

bse-

suc-

to a

tact.

as if

cap-

ver.

nec-

arily

nvitver.

un-

fter,

very

nty-

cond

was

hild

very

suffi.

f no

cept

mor-

e by

plied

thod tient and pills. the

rders ngar-

have hich eling per-

head

f the e pill pill head hing in on e forthe

nach.

s not

'arn. el on that

the conjugate of he

tio

wh

on

Ch

the

thr

In

rela

stre

sec

sto

are

and

stre livi

sali

upo

It el

ive

and

cisc

this

is e

88 J

daytime, so that there is no hour, night or day, when there are not thousands of Chinamen sleeping under the effects of opium, or otherwise, in the bunks which we have found there. Besides these bunks, rolls of bedding for use in sleeping on floors and various other sleeping accommodations are found. All these bunks, rolls, etc., have been carefully noted and enumerated in their reports furnished to us by the surveyors, and from them we reach the following results of an estimated enumeration of the population of Chinatown. For convenient reference, the numbers of the blocks named from time to time in this report are those by which the same blocks are distinguished in the books of the assessor. The boundaries of the blocks so numbered are given as follows:

	bunks,
Broadway, Pacific, Kearny, and Dupont	. 183
Pacific, Jackson, Kearny, and Dupont	
Jackson, Washington, Kearny, and Dupont	. 1446
Washington, Clay, Kearny, and Dupont	. 976
Clay, Sacramento, Kearny, and Dupont	. 1388
Sacramento, California, Kearny, and Dupont	. 741
Broadway, Pacific, Dupont, and Stockton	. 477
Pacific, Jackson, Dupont, and Stockton	. 1969
Jackson, Washington, Dupont, and Stockton	. 2828
Washington, Clay, Dupont, and Stockton	. 2325
Clay, Sacramento, Dupont, and Stockton	. 1287
Sacramento, California, Dupont. and Stockton	. 764
Total number of bunks	.15180

"Not only have your committee found that the rule is for two persons to each 'bunk,' and relays of sleepers through the day in many, if not most instances, but women and children seem also to be stowed away in every available nook and corner, without reference to any special accommodation being provided for them. Taking, therefore, the total number of 'bunks,' and multiplying that total by two, must be at least a safe minimum estimate of the population in those twelve blocks, with every probability favoring the conclusion that an addition of perhaps 20 per cent. would not more than cover the real number of Chinese inhabiting the locality. On this basis, allowing two persons to a 'bunk,' and adding no percentage for excess from any of the foregoing reasons, we have a population in Chinatown of 30,360. And this, your committee believe, is the lowest possible estimate that can fairly be made.

"CHINESE WOMEN AND CHILDREN. "It is a less difficult problem to ascertain the number of Chinese women and children in Chinatown, than it is to give with accuracy the male population: First, because they are at present comparatively few in numbers; and, second, be-cause they can nearly always be found in the localities which they inhabit. This investigation has shown, however, that whatever may be the domestic family relations of the Chinese empire, here the relations of the sexes are chiefly so ordered as to provide for the gratification of the animal proclivities alone, with whatever result may chance to follow in the outcome of procreation. There are apparently in Chinatown but few families living as such, with legitimate children. In most instances the wives are kept in a state of seclusion, carefully guarded and watched, as though 'eternal vigilance' on the part of their husbands 'is the price of their virtue.' Wherever there are families belonging to the better class of the Chinese, the women are guarded and secluded in the most careful manner. Wherever the sex has been found in the pursuance of this investigation under other conditions, with some few exceptions, the rule seems to be that they are here in a state of concubinage, merely to minister to the animal passions of the other sex, with such perpetuation of the race as may be a resultant consequence, or else to follow the admitted calling of the prostitute, generally of the lowest possible grade, with all the wretchedness of life and consequence which the name implies. That this is not mere idle assertion, the following statement of the number of women and children found in Chinatown in the course of this investigation, and which includes probably nearly every one living in that locality, will, we trust, sufficiently demonstrate:

Women	Living as families.
	Herded together with apparent indiscriminate parental relations.
Children576	and no family classification, so far as ascertained.
Prostitutes567 Children87	Professional prostitutes and chil-

"CHINESE PROSTITUTION.

"This examination has led to the foregoing result in regard to the relation of the sexes. No welldefined family relations have been discovered other than as shown, while the next classification seems to be a middle stratum between family life and prostitution, partaking in some measure of each, if such a condition of things can be possible. The most revolting feature of all, however, is found in the fact that there are so large a number of children growing up as the associates, and, perhaps, the proteges of the professional prosti-tutes. In one house alone, on Sullivan alley, your committee found the inmates to be nineteen prostitutes and sixteen children. In the localities inhabited largely by prostitutes, women, and children, who apparently occupy this intermediate family relationship already alluded to, live in adjoining apartments and intermingle freely, leading to the conclusion that prostitution is a recognized and not immoral calling with the race, and that it is impossible to tell by a survey of their domestic customs where the family relationship leaves off and prostitution begins.

"WHITE PROSTITUTION.

"The investigations which have been carried on by your committee have developed another disgusting and surprising feature. It is in reference to white prostitution in that locality. The map accompanying this report shows in what sections and to what extent of area white prostitution exists in Chinatown. The number of degraded women who ply this vocation there is unknown. But the point that will impress itself more strongly upon the ordinary mind, is that these women obtain their patronage almost entirely from the Chinese themselves. Their habitations seem to have been taken up in the Chinese quarter solely for this purpose, and their mode of life seems to be modeled after that of the Mongolian to a larger extent than after the manners and customs of the race to which they belong. Many, if not most of them, confirmed victims to the opium habit in one form or another, they present pictures of pallid wretchedness hard to parallel in

.111

ex-

nere

the

per-

nse-

g of

ible

is is

d in

and

ving

lem-

tions,

B, 80

chil-

sult

well-

ered

ation

life !

re of

008Fi-

ever,

oum-

and,

rosti-

lley,

eteen

ocali-

and

diate

n ad-

lead-

ecog-

race,

ey of

tion-

ed on

dis-

rence

map

n ez-

raded

more

these

tirely

tions

quar-

f life

olian,

s and

dany,

o the

llel in

any community where total depravity rules supreme, and their sex sinks to the lowest point of human degradation. The Chinese drug and opium stores at night usually contain numbers of these wretched beings, seeking opium or medicaments for the physical diseases to which they are constantly subjected; and more wan, sad, hopeless, and wretched-looking faces the human eye seldom encounters in the streets or slums of the most populous cities of the world. This is a feature of prostitution in Chinatown with which it is difficult and perhaps impossible to deal. Your committee can only point out the conditions under which it exists as one of the numerous evils which attach to and grow out of the presence of the Chinese among us. It is one of the many counts in the indictment against the race, and upon which we hold them up for trial before the public opinion of our country, from which we be-speak a just and wise verdict. For the poor, wretched woman who enters this particular walk of life there need be no punishment other than her own miseries; no word of reproach, but all our pity. Let her 'who enters here leave hope behind.'

"WHITE WOMEN LIVING WITH CHINAMEN.

"Another surprising as well as disgusting feature developed in this investigation is the fact that there are numerous instances of white women living and cohabiting with Chinamen in the relation of wives or mistresses. In one instance where an example of this was found, there was one white woman living among a large number of Chinese women and children—the mistress of one or more of the 'little brown men'-who, when the place was visited by the surveyors employed by your committee, roundly berated them for thus invading the citadel of their domestic rights, and threatened various modes of punishment therefor. In one instance a Chinaman had assumed marital relations with a fair widow with several children by a Caucasian husband. At 900 and 902 Dupont street there is a white woman living with a Chinaman on the third floor; at 613 Jackson street, second floor; at 708 Commercial street, second story; at 708 Commercial street, third at 710 Commercial street, third story; at 718 Commercial street, second story. are in each of the foregoing one white woman and one Chinaman living together. At 740 Commercial street, second story, and at 916 Stockton street, there are two white women in each place living with Chinamen.

" CONCLUSIONS AND RECOMMENDATIONS.

"We have thus presented for your consideration and for the consideration of the public, the salient features of the mode of life, the effect upon home labor, habits, industries, vices, and contempt of local laws, of Chinese in Chinatown. It clearly appears that the present and prospective condition of things calls for a more energetic and better-defined line of policy than San Francisco has heretofore displayed, and the adoption and enforcement of such measures as will bring this people under the same control as that which is exercised over other citizens generally. We cannot shut our eyes to the fact that the Treaty and Restriction Act constitute no effectual barrier as yet against Chinese immigration. The tide

may not be flowing in upon us so rapidly nor with the same volume as before, but 'the cry is still they come,' and the problem of Chinese immigration is not yet solved. Moreover, it is far better to face the fact that through British Columbia ou the north and Mexico on the south the march of the Mongolian cannot be effectually stayed, except by such congressional legislation and such an expenditure of public moneys as shall render such a result physically impossible of accomplishment; and we must meet the issue as it is presented, and settle the question of how best to deal with the Chinaman when once he is among us, how best to protect ourselves from the baneful effects of his presence. The right of protecting ourselves, the right of holding the Chinese to the same responsibilities under the laws that other citizens are held, cannot be disputed. The fact that the race is one that cannot readily throw off its habits and customs, the fact that these habits and customs are so widely at variance with our own, makes the enforcement of our laws and compulsory obedience to our laws necessarily obnoxious and revolting to the Chinese; and the more rigidly this enforcement is insisted upon and carried out, the less endurable will existence be to them here, the less attractive will life be to them in California. Fewer will come, and fewer will remain. The very race proclivities which we thus abhor may be converted into a better safeguard against Chinese immigration than any law of Congress or any treaty, if these race proclivities, which are sure to run counter to our laws and our system of morals, are held sternly in check, at whatever cost to the state or to the city.

"COMPEL THE CHINAMEN,

"By municipal laws which are not only enacted but enforced, to live like our own race; prevent them from burrowing and crowding together like vermin; enforce cleanliness in mode of life; break up opium dens and gambling hells; restrict the number of inhabitants in any given block in the city; enforce upon the people, so far as may be possible by every legitimate method that can be devised, a cost of living that shall approach as nearly as possible that of the ordinary white laborer. Take away from the Chinaman by such methods as these the largest possible part of the profits of his earnings as they accrue now from his present mode of life, and thus exhaust every effort to bring him to the level of the at present fearfully-handicapped American laborer, and California, or San Francisco at least, will soon cease to be attractive as a place of abode, and a less profitable field of labor for the Chinaman than it is at present. Scatter them by such a policy as this to other States, and let other States take home to themselves the full measure of the extent of the curse of Chinese immigration, when they shall have felt the evil as we feel it here. Municipal laws that are made to be enforced, and that are enforced—that shall prohibit any greater number of people from living on the space covered by one block, for example, than now live on such space, taking, if you please, the most densely inhabited block outside of Chinatown for a standard as the limit of the rule; that shall embody the Cubic Air law as it at present stands; that shall compel the use of chimneys and proper cooking

mi

cia

of

tri

spl

ter

the

the

to 1

ory

of t

ons

l

stoo

wer

cian case

form

espe

mad

1129

enrr

ern

Inoc

been

1127

also

place

than

form

it do

come

in al

Medi

Dotec

more

of an

fatal

usna

expre

plyin

ervat

natni

in the

of the

port]

A

facilities: that shall enforce cleanliness at the cost of the occupants; that shall restrict prostitution; that shall suppress and put out of existence barricaded gambling dens; that shall prevent, under the most stringent penalties, the violation of fire and sanitary laws of every description; that shall, as a sanitary measure, prevent the exhumation of the remains of deceased persons, except under a much heavier tax than at present imposed; that shall prevent overcrowding in their theatres-will correct as far as possible many of the abuses that grow out of the presence of this people, and can hardly fail to drive them from among us. Hold, if necessary, the property-owner responsible for the overcrowding or other unlawful use of his property, and make the penalty imposed for violation of such laws a lien upon the property itself, and San Francisco will soon cease to be a paradise or even an attractive place of habitation for the Mongolian.

"The report was placed on file, and the committee instructed to prepare an ordinance embodying the recommendations made in the report."

Notes from the History of Medicine and Medical Opinion.

Surgeon-General Chas. A. Gordon thus writes in the Med. Press, June 17:

During the Sung dynasty, namely A. D. 960 to A. D. 1280, the study of Medical Jurisprudence was greatly encouraged in China; voluminous works on Therapeutics were also published in the same period. In certain departments of jurisprudence the Chinese physicians then enjoyed, as at the present day they do, a very high reputation. Among other instances of superior sagacity in this respect to which, with or without good reason, they pretend, is the method by which they affect to discover whether a man found dead by strangulation had been his own executioner, or had been strangled by others; whether in the case of a body being found in the water, death preceded or followed immersion; and whether, in other cases. death has been the result of natural causes or of felonious violence (Hamilton's "History of Medicine," vol. i., p. 31).

In the First Age of mankind, according to the medical sages of ancient China, the ancients prepared medicines, but seldom used them, their health was so perfect; in the Middle Age virtue became degenerated, and strength decayed; then disease arose. At the present time, medicines are used for the cure of diseases when they lurk within the body, and caustics, sharp instruments, and moxas to drive away the distemper; and yet, all these inventions bring no great advantage. In these ancient views, it will be observed how closely the ideas held in China in regard to the origin of disease coincide with those entertained in regard to the same mystery by ancient Hindeo writers.

"There are six sorts of distempers"—so wrote Chun-yn-y. "The first, of the presumptuous or haughty; the second, of the covetous; the third, of the poor, who want the necessaries of life; the fourth, of those who have the yang and the yin irregular; the fifth, of those who from weakness and want of flesh are not able to take any remedies; the sixth, of those who give credit to

quacks and imposters, and have no faith in regular physicians."

In the treatment of the sick—"Regard must be had to the age and constitution of the patient; to his constitution, whether of plethora or of inanition; also whether the distemper be new or inveterate. It is necessary likewise to examine the degrees of malignity in poisonous medicines. In short, we must not obstinately adhere to the letter of this rule on all occasions; but it must be moderated as different circumstances require." The sages, or masters of medicine, when they make use of remedies to restore the health of the upper region, take special care not to excite any disorder in the lower region; when in the lower region, not to disturb the upper; when in the middle, not to affect the upper or lower.

More than a score of centuries before Hippocrates wrote of critical days, and at a period even earlier than they were noticed by ancient Hindoo physicians, allusion occurs in writings of the time now referred to indicative of the fact that "crises in disease, and the natural tendency which the body has to cure itself by critical evacuations at certain periods," were eulogized in the time of Hoangti. And from that period down to the present the Chinese have continued to lay much emphasis on the periodicity of diseases, especially febrile diseases. Fever patients are thought to exhibit a marked change every seventh day, and, according to native opinion, such affections in their progress means "seven days light and seven days heavy." In the works of the ancient Chinese physicians, characteristic descriptions of particular forms of fever are given; thus intermittent fever was minutely and correctly described by them B. C. 2600. Two thousand years before our era also, the disease cholers was correctly described by them, and by the precise name by which at the present day it is known in China, namely, havo luan.

A reference to the system of therapeutics and materia medica of the Chinese will suffice to indicate several important points in reference to their theory of disease, and also that on which their methods of treatment are based. For example, various diseases are by them assigned to "poisons" and "specific poisons" in the body; in regard to others the "humoral doctrine" holds sway as it did, and, indeed, still does to a certain extent among western nations. The doctrine of "blood poisoning," involving the administration of "blood purifiers," finds favor with the public, and profit to medicine vendors in China, as elsewhere.

Throughout their ancient writings various illustrations are to be met with of the doctrine of similius similibus, having from very distant times been carried into practice. From time immemorial the native Chinese system of treating diseases has been strictly homocopathic, things being presented which in their nature are believed to resemble things in man. Talismans and charms are used, even by "the profession," against epidemics; branches of the peach tree are suspended "by authority" over the doors of houses and cattle-sheds to ward off evils of various kinds, very much as twigs of the mountain ash used to be, if, indeed, they are not still, in certain parts of Great Britain. Instances are related of men

111

gu-

nst

nt:

in.

or

ine

les.

the

be

e."

hey

any

Wer

the

ven

ndoo

the

that

ency

tical

d in

OWB

lay

1808,

are

sev-

such

days

s of

de-

ven;

cor-

hou-

olera

pre-

OWB

and

indi-

their their

nple,

'poi-

holds

rtain

ne of

ation

ablic,

else-

illus-

ne of

times

nemo eases

pre-

armi

t epi-

ended

and

cinds,

sed to

parts f men

having been hypnotized, the operators in these instances being women!

According to the physiology of the Chinese, man is a little universe, or microcosm, and to this microcosm is extended the operation of the yang and the yin, in other words the male and the fe-male principles of nature. Here, then, we find reproduced, if, indeed, not the original of the theory to which allusion has already been made in reference to Egypt and to India, and certainly the prototype of a similar theory recently enunciated as an instance of the most advanced sciences of the present time, while in regard to the doctrine of nature, inasmuch as throughout the sphere of living organisms certain sexual characteristics present themselves, the idea represented in the two principles indicated by the yung and the yin was certainly as much in accordance with the phenomena of living things as that of Hippocrates long subsequently enunciated in regard to what by him was called Nature. A ready theory to explain not only the occurrence of diseases, but of temporary derangements in the functions of the body, is that of harmonious or inharmonious action of the two "principles" of Nature thus

In China, and also in India, as already noticed, the administration of anæsthetics was well understood, and practiced from a very early date; they were applied locally or generally by the physi-cians according to requirements in particular cases, the root of aconite being used for the former, certain fungi for the latter purpose.

According to Chinese medical authors, more especially a work entitled Taou-tchin-fa, small-pox made its appearance in China about the year B. C., 1122; other writers, however, assign its first occurrence in that empire to the period of the Eastern Tsin dynasty, namely, A. D. 317 to A. D. 420. Inoculation with the virus of that disease had been known and practiced in China from the time of the Sung dynasty, namely, A. D. 960 to A. D. 1127, and there is reason to believe that it was so also for a long period previous to that date. But, according to Grozier (I.c. p., 489), "the Chinese place less confidence in the practice of inoculation than the Europeans, and for this reason, because the former are convinced by numberless instances that it does not prevent a return of small-pox when it becomes epidemical," and further, "that the disorder, even when communicated naturally, does not in all cases secure the patient against the recur-rence of the malady." (Hamilton's "History of (Hamilton's "History of Medicine," vol. i., p. 30.) In fact, as already noted to have been the case in India, so in China, the operation appears to have been performed more with the object of conciliating "the demon of small-pox," or the "deity" of that disease, than as a means of protection against the severe fatal forms of that malady. The operation is usually alluded to under the somewhat poetical expression "cultivating heaven's flowers," implying thus that its object was in reality the preserration, or at all events development, of the natural disease, the "poison" of which resides in the system till developed, as fire is concealed in the flint. If this interpretation be the true one of the references which occur to the operation in question, and a careful consideration of their purport leaves no doubt on the subject, the natural

inference is, that in course of time the real object of inoculation passed away out of mind, and that prevention took the place of cultivation of the disease thus artificially introduced into the human system. The particulars here given bear an important relation to the general system of "inoculation" for various diseases now practiced. They indicate, moreover, the importance of research, in works referring to times past; and they point to similar results from the new system of "inoculation" as those which characterized the old.

The Chinese consider pulmonary consumption to be infections; they account for the disease being thus conveyed on the hypothesis that at the moment of death of the phthisical patient, a "worm" is expelled which enters the body through the breath of those in attendance. Have we not then, in the hypothesis here indicated, an approach to, if not identical with that which assigns to the "bacillus tuberculi" the property of

transmitting the disease alluded to?

Of surgical knowledge, the Chinese appear to be destitute. As a rule, their practitioners are timid operators; as to external operations, they are limited to scarifications, moxas, and plasters. From a translation by Dr. Lockhart of a Chinese treatise on midwifery, a few extracts will indicate the general purport of the whole. "The great energy of nature is called life. The passing into life is a spontaneous act of nature. present age we often hear of difficult labors; if they terminate favorably it is not because of human interference, and if otherwise, you do not mean to say that this is the fault of nature. Can it be that nature would slay a man at the very gate of life? Man should follow nature, and not interfere with her operations by useless meddling." And so on.

According to their belief, also, the principal part of the healing art consists in the feeling (i. e., by means of the fingers) of the pulse. In determining the sickness by laying of the hand upon the pulse, Chinese physicians are peculiarly clever, and their knowledge in regard to this part of diagnosis is really surprising. They describe twenty-four different kinds of pulses, with their subdivisions. In their nosology, diseases are di-vided into more than a thousand different kinds, for the names of which it would be impossible to give in English the corresponding words to those represented in the Chinese characters. practice, however, is far in advance of their theory, and some of their treatises on dietetics and medical practice contain good advice, the result of experience.

As far as authority is concerned, their system of medicine has high claims on our consideration, being in this respect superior to that of the Greeks, and conjecturally so to that of the Hindoos. But at the present day it has so degenerated that it is now a strange combination of a few anatomical facts and some really useful observations buried under an absurd mixture of astrology and superstition.

Diseased Sheep in Chicago.

The Erie (Pa.) Herald, under date of July 29, 1885, says that hundreds of diseased sheep are overlooked daily at the stock-yards in Chicago, and slaughtered as mutton for the city. Says the ar-

N

DI

wi

ab

an

flu

wh

its

gu

for

ant

for

ma

izec

of :

wri

to d upo

I

min

rem

auc!

alve

the

0

ticle: "The health inspectors are in apparent ignorance of the fact that diseased sheep are almost daily sold at the stock-yards. Sales are made openly, despite the presence of inspectors, and no bar has thus far been interposed to stop the trade. The animals are shocking spectacles, and the idea that such stuff is sold daily as food for thousands is horrifying. A thousand diseased sheep are bought at the stock-yards daily by mercenary scalpers, and sold to the unsuspecting public as good mutton. A syndicate is interested in the traffic. A reporter paid a visit to the pens at the stock-yards recently for the purpose of investigat ing. No inspectors were about. Out of forty pens, twenty-eight contained diseased sheep, and on an average there were twenty diseased sheep in each pen. Scabs, foot-rot, and glanders or snuffles, were the ailments of the entire lot. The sheep, it was definitely ascertained, were slaughtered and were sent out to the local butcher shops or to the Jackson street market."

The Grecian Bend.

Dr. E. W. Germer, of Erie, President of the Pennsylvania State Board of Health, was recently accosted on the street by a reporter of the Erie Herald, when the following conversation ensued:

"Doctor," said the reporter, "do you ever have people imagine they have the cholera?"

"Yes," replied the doctor, with his indescriba-ble accent. "I know five or six cases where they were scared half to death. Some of them were men who had eaten cucumbers and drank beer. Beer and cucumbers will double them up every time. Fill a thin bottle with beer and put some cucumbers in, and the next morning the bottle will be burst. Another case was where a wo-man had drank a pitcher of ice-water. Bloodheat is ninety-eight degrees, and ice-water is thirty-five or forty degrees. No wonder the wo-man had the 'Grecian bend.'"

"Another cause of complaint," said the doctor as the reporter started to go, "is Paris green the farmers put on cabbages. They sprinkle Paris green on to kill the bugs, and some poor devil

eats it, and he is sick."

Dietetic Errors as a Cause of Disease.

I have come to the conclusion that a proportion amounting at least to more than one-half of the disease which imbitters the middle and latter part of life among the middle and upper classes of the population is due to avoidable errors in diet. Further, while such disease renders so much of life, for many, disappointing, unhappy, and profitless, a term of painful endurance, for not a few it shortens life considerably. It would not be a difficult task-and its results if displayed here would be striking-to adduce in support of these views a numerical statement showing causes which prematurely terminate life among the classes referred to in this country, based upon the Registrar-General's reports, or by consulting the records of life assurance experience. I shall not avail myself of these materials in this place, although it would be right to do so in the columns of a medical journal. My object here is to call the attention of the public to certain facts about diet which are insufficiently known, and therefore inadequately appreciated. And I shall assume that ample warrant for the observations made here is within my reach, and can be made available if required .- Sir Henry Thompson, in Popular Science Monthly for July.

Official List of Changes of Stations and Duties of Medical Officers of the United States Marine Hospital Service, for the two weeks ended July 25, 1885.

Fessenden, C. S. D., surgeon. Leave of absence extended eight days on account of sickness, July 20, 1885.

Irwin, Fairfax, passed assistant surgeon. Granted leave of absence for ten days, July 14, 1885. To inspect unserviceable property at St. Louis, Mo., July 15, 1885.

Items.

-M. Coestu, of Paris, reports two hundred and ninety-eight cases of diphtheria treated by large doses of calmel, and only twelve deaths.

-Dr. Trileski has employed cocaine locally in vomiting and for the pains of labor. The effect in both cases was satisfactory. No effect was produced on the course of the labor.

—The Barotte prize, of 3,400 francs, awarded to the inventor of the most important and useful invention for agriculture, has been bestowed on M. Pasteur, for his discoveries in contagious dis-

-The Monthly Journal of Sciences states, on the authority of a well-informed French contemporary, that the excrements of dogs are now collected in Paris and worked up into peptones and powdered extracts of meat.

-The Academy of Sciences, whose turn it is this year to award the Institute's biennial prize of 20,000 fr., has pronounced in favor of Dr. Brown-Séquard. M. de Brazza, the African explorer, was amongst the competitors.

-The Société Médicale des Hôpitaux has opened a subscription toward providing a bust of Dr. Noël Gueneau de Mussy, recently deceased, which is to be placed in the Hôtel Dieu, to which hospital he had been attached for many years.

-The average duration of life in cancer of the tongue is, without operation, ten and a half months; with operation, sixteen months. In some cases, after operation, the patients have lived for from two to five years, or even ten years. -New York Medical Record.

-Dr. Biefel and Dr. Poleck have recently discussed in the Zeitschrift für Biologie, the question of the relative fatal effects of charcoal fumes and of illuminating gas, it being asserted that in the former case .19 per cent. in the air of CO destroys human life in thirty-five minutes, while a limit of 1 per cent. is exceeded in the latter case before a similar result ensues. This is attributed to the presence of oxygen in the gas; but Dr. Wagner has disputed these conclusions on the ground that the experiments were not conducted in a satisfactory manner. He agrees, however, with the statement that a mixture of gas and air possessing fatal properties is necessarily in an explosive condition.